

**ELSEVIER** 

Available online at www.sciencedirect.com



Computer Communications 30 (2007) I-XXXVIII



www.elsevier.com/locate/comcom

# Subject Index of Volume 30

802.11

An efficient cluster-based multi-channel management protocol for wireless Ad Hoc networks 1742

802.11

Modified EDCF to improve the performance of IEEE 802.11e WLAN 841

802.11

Novel collision detection scheme and its applications for IEEE 802.11 wireless LANs 1350

802.11

Power control and fairness MAC mechanisms for 802.11 WLANs 1527

AAA

Enhancing mobility management protocols to minimise AAA impact on handoff performance 608

ABR

Performance analysis and evaluation for multi-traffic networks with priority control 1562

**Access control** 

Using the vulnerability information of computer systems to improve the network security 2032

Access Control Lists

An argument for simple embedded ACL optimisation 280

Access gateway

QoS-aware Internet access schemes for wireless mobile ad hoc networks 369

Access grid

Userware: A framework for next generation personalized services 619

Access networks

Radio-over-Fiber based architecture for seamless wireless indoor communication in the 60 GHz band 3598

Accounting

A platform for charging, billing, and accounting in future mobile networks 516

ACLS

An argument for simple embedded ACL optimisation 280

Active queue management

Active queue management algorithm considering queue and load states 886

Active queue management

RaQ: A robust active queue management scheme based on rate and queue length 1731

**Actuation attack** 

Towards characterizing the effectiveness of random mobility against actuation attacks 2546

Ad hoc

Reliable transmission of multimedia streaming using a connection prediction scheme in cluster-based ad hoc networks 440

Ad-hoc

Jumping ant routing algorithm for sensor networks 2892

Ad hoc group communications

A DoS and fault-tolerant authentication protocol for group communications in ad hoc networks 2428

Ad hoc network

A link availability-based QoS-aware routing protocol for mobile ad hoc sensor networks 3823

Ad hoc network

A scalability comparison of GST and SST MANET multicast routing algorithms 3851

Ad Hoc network

An efficient cluster-based multi-channel management protocol for wireless Ad Hoc networks 1742

Ad hoc network

DREAM: A system for detection and reaction against MAC layer misbehavior in ad hoc networks 1841

Ad hoc network

Dynamic frame length channel assignment in wireless multihop ad hoc networks 3832

Ad hoc network

Improving search efficiency using Bloom filters in partially connected ad hoc networks: A node-centric analysis 3000

Ad hoc network

Using event detection latency to evaluate the coverage of a wireless sensor network 2699

Ad hoc networks

A hybrid meshed multipath forwarding scheme in wireless ad hoc networks 3346

Ad hoc networks

A low overhead dynamic route repairing mechanism for mobile ad hoc networks 1152

Ad hoc networks

A QoS multicast routing protocol for clustering mobile ad hoc networks 1641

Ad hoc networks

An adaptive redundancy protocol for mesh based multicasting 1015

Ad hoc networks

Performance evaluation and comparison of different ad hoc routing protocols 2478

Ad hoc networks

Performance evaluation and simulations of routing protocols in ad hoc networks 1890

Ad hoc networks

Quorum and connected dominating sets based location service in wireless ad hoc, sensor and actuator networks 3627

#### Ad hoc networks

Toward secure and scalable time synchronization in ad hoc networks 2453

#### Ad hoc networks

Using artificial intelligence in routing schemes for wireless networks 2802

#### Ad hoc wireless network

Energy efficient multicast routing in ad hoc wireless networks 3746

#### Ad hoc wireless networks

A novel channel assignment scheme for improving channel reuse efficiency in multi-channel ad hoc wireless networks 3416

#### Ad-hoc wireless networks

Adaptive backup routing for ad-hoc networks 453

#### Adaptation

Guaranteeing the network lifetime in wireless sensor networks: A MAC layer approach 2532

#### Adaptive

Performance analysis of an adaptive handoff algorithm based on distance information 1278

#### Adaptive clustering

Adaptive clustering in wireless sensor networks by mining sensor energy data 2968

# Adaptive data broadcasting

A new high rate adaptive wireless data dissemination scheme 957

# Adaptive location update area

Adaptive location update area design for wireless cellular networks under 2D Markov walk model 2060

#### Adaptive mobile networks

Analysis and algorithms design for the partition of large-scale adaptive mobile wireless networks 1899

#### Adaptive schemes

Coexistence of wireless LANs and Bluetooth networks in mutual interference environment: An integrated analysis 192

# Address reservation

AROD: An address autoconfiguration with address reservation and optimistic duplicated address detection for mobile ad hoc networks 1913

# Advance reservation

A distributed advance reservation system for interconnected slotted optical networks: Design and simulations 1142

#### Aggregate cache

Cache invalidation strategies for internet-based mobile ad hoc networks 1854

#### Alarm return

Adaptive security design with malicious node detection in cluster-based sensor networks 2385

# All optical network

Coupled-layer type waveband path design method corresponding to traffic demand fluctuation 965

#### AMC

Modeling of streaming and elastic flow integration in OFDMA-based IEEE802.16 WiMAX 3644

# **Analysis**

Experimental validation of the ON-OFF packet-level model for IP traffic 975

#### **Analytical model**

Analytical modeling of a time-threshold based bandwidth allocation scheme for cellular networks 1036

# Analytical models and simulations results

Adjustment mechanism for the IEEE 802.11 contention window: An efficient bandwidth sharing scheme 2686

#### 802.11 anomaly

Adjustment mechanism for the IEEE 802.11 contention window: An efficient bandwidth sharing scheme 2686

#### **Anomaly detection**

Anomaly detection in TCP/IP networks using immune systems paradigm 740

#### **Anomaly detection**

Detecting Denial-of-Service attacks using the wavelet transform 3203

# **Anycast**

A hybrid method for solving ARWA problem on WDM network 385

#### Anycast

An integrated end-to-end QoS anycast routing on DiffServ networks 1406

#### **Anycast**

Efficient multimedia distribution architecture using anycast 288

# AODV

A low overhead dynamic route repairing mechanism for mobile ad hoc networks 1152

#### AODY

Adaptive backup routing for ad-hoc networks 453

#### Applications testing

Evaluation of network traffic workload scaling techniques 3096

# Approximation algorithm

Energy-aware multicasting in wireless ad hoc networks: A survey and discussion 2129

#### MOZIVI

Instability effects of two-way traffic in a TCP/AQM system 2172

AQM

#### F

RaQ: A robust active queue management scheme based on rate and queue length 1731

# AQM

Stability analysis of a novel exponential-RED model with heterogeneous delays 1058

# ARAMA (Ant Routing Algorithm for Mobile Ad-hoc Networks)

Jumping ant routing algorithm for sensor networks 2892

Area coverage

On the efficient and fast response for sensor deployment in sparse wireless sensor networks 3892

#### ARQ

Cross-layer error-control with low-overhead ARQ for H.264 video transmission over wireless LANs 1476

#### ARQ

Efficient ARQ protocols for exploiting cooperative relaying in wireless sensor networks 2765

#### Arrival rate dependent

Adaptive arrival rate dependent traffic balancing with redundancy 1220

# Artificial immune system

An agent based and biological inspired real-time intrusion detection and security model for computer network operations 2649

#### Artificial immune systems

Anomaly detection in TCP/IP networks using immune systems paradigm 740

#### Artificial neural networks (ANN)

Using artificial intelligence in routing schemes for wireless networks 2802

# **Assured forwarding**

Refined assured forwarding framework for differentiated services architecture 3841

#### Assured services

Fair early drop marker for improving TCP fairness in multiple domain DiffServ networks 1205

#### Asymmetric access rights

Performance optimization with propagation delay analysis in WDM networks 3572

#### ATM network design

On the problem of capacity allocation and flow assignment in self-healing ATM networks 3169

#### Attack description

An ontology description for SIP security flaws 1367

# AuC

Analytical model for authentication transmission overhead between entities in mobile networks 1713

#### Authentication

An Accelerated IEEE 802.11 Handoff Process Based on the Dynamic Cluster Chain Method 1383

# Authentication

Analytical model for authentication transmission overhead between entities in mobile networks 1713

# Authentication

Improving authentication of remote card transactions with mobile personal trusted devices 1697

# Authentication

Off-line password-guessing attack to Peyravian—Jeffries's remote user authentication protocol 52

# **Authentication protocol**

A DoS and fault-tolerant authentication protocol for group communications in ad hoc networks 2428

# Authentication vector

Analytical model for authentication transmission overhead between entities in mobile networks 1713

# Autoconfiguration

AROD: An address autoconfiguration with address reservation and optimistic duplicated address detection for mobile ad hoc networks 1913

# **Autonomic computing**

A management scheme for distributed cross-layer reconfigurations in the context of cognitive B3G infrastructures 3807

#### **Autonomic computing**

Agent based middleware infrastructure for autonomous context-aware ubiquitous computing services 577

#### Availability

Failover, load sharing and server architecture in SIP telephony 927

#### **B2B** environments

Evaluation of the effect of SSL overhead in the performance of e-business servers operating in B2B scenarios 3063

# **B3G** wireless infrastructures

A management scheme for distributed cross-layer reconfigurations in the context of cognitive B3G infrastructures 3807

#### Backbone

Quorum and connected dominating sets based location service in wireless ad hoc, sensor and actuator networks 3627

#### Backoff algorithms

Performance evaluation of a new backoff method for IEEE 802.11 3698

#### Backoff time

Performance evaluation of a new backoff method for IEEE 802.11 3698

#### Backup route

Adaptive backup routing for ad-hoc networks 453

#### Bandwidth

A fair bandwidth distribution mechanism in a Diffserv network 358

#### Bandwidth

An enhanced QoS CBT multicast routing protocol based on Genetic Algorithm in a hybrid HAP-Satellite system 3126

#### Bandwidth allocation

A mini-bandwidth guaranteed and differentiated service supporting bandwidth allocation algorithm for Multimedia Group Communication 465

#### Bandwidth allocation

Mobile computing: Opportunities for optimization research 670

#### Bandwidth efficiency

An adaptive packet scheduling algorithm for efficient downlink bandwidth allocation in UWB based wireless infrastructure networks 2087

# Bandwidth provision

An objective-oriented service model for VoIP overlay networks over DiffServ/MPLS networks 3055

# Bandwidth provisioning

Inter-autonomous system provisioning for end-to-end bandwidth guarantees 3757

# Bandwidth reservation

Adaptive resource reservation schemes for proportional DiffServ enabled fourth-generation mobile communications system 1613

# Bayesian networks

A management scheme for distributed cross-layer reconfigurations in the context of cognitive B3G infrastructures 3807

#### Beacon exchange rate

HUSEC: A heuristic self configuration model for wireless sensor networks 1624

#### **Bi-casting**

TLMM: MIP-based Three Level Mobility Model 1244

# Bi-directional transmission strategy

An M-time inheriting transmission strategy for interactive multimedia applications in wireless networks 1187

#### Billing

A platform for charging, billing, and accounting in future mobile networks 516

# Bin-packing

Novel radio resource allocation strategy for multimedia content delivery over satellite multicast/broadcast systems 1870

#### Binary trie

Build shape-shifting tries for fast IP lookup in O(n) time 3787

#### Biologically-inspired

A biologically-inspired clustering protocol for wireless sensor networks 2786

# **Bivariate generalized Pareto distribution**

A truncated bivariate generalized Pareto distribution 1926

#### **Blocking probabilities**

Handoff multiple queue model in microcellular networks 396

# **Bloom filter**

Improving search efficiency using Bloom filters in partially connected ad hoc networks: A node-centric analysis 3000

#### Bluetooth

Coexistence of wireless LANs and Bluetooth networks in mutual interference environment: An integrated analysis 192

#### Bluetooth

New bluetooth interconnection methods: Overlaid Bluetooth Piconets (OBP) and Temporary Scatternets (TS) 2258

#### Bluetooth

Practical channel state aware and cooperative packet scheduling disciplines for coordinating colocated Bluetooth and IEEE 802.11b devices 1569

# Border gateway protocol

Modified flap damping mechanism to improve inter-domain routing convergence 1588

#### Broadband

Low-latency handoff inter-WLAN IP mobility with broadband network control 750

#### **Broadband networks**

Bandwidth estimation for multiplexed videos using multinomial model 269

#### **Broadcast**

Contact-based buffering for delay-tolerant ad hoc broadcasting 3144

#### **Broadcast**

Convergence of periodic broadcasting and video-ondemand 1136

#### **Broadcasting**

A cellular multi-objective genetic algorithm for optimal broadcasting strategy in metropolitan MANETs 685

# **Broadcasting**

An Interleaving Slotted-PolyHarmonic-Staircase Broadcasting Protocol for Near Video-on-Demand Services 807

#### **BSS** transition

An Accelerated IEEE 802.11 Handoff Process Based on the Dynamic Cluster Chain Method 1383

#### Buffer

An Interleaving Slotted-PolyHarmonic-Staircase Broadcasting Protocol for Near Video-on-Demand Services 807

# **Buffering**

Contact-based buffering for delay-tolerant ad hoc broadcasting 3144

#### **Burst assembly**

Performance of OBS techniques under self-similar traffic based on various burst assembly techniques 315

# **Burst assembly**

Provision of differentiated performance in Optical Burst Switching networks based on burst assembly processes 3449

# **Bursty convergecast**

Reliable bursty convergecast in wireless sensor networks 2560

#### **Business routing**

Userware: A framework for next generation personalized services 619

#### 07.05.Bx

PEACH: Power-efficient and adaptive clustering hierarchy protocol for wireless sensor networks 2842

#### Byzantine attacks

Pair-wise path key establishment in wireless sensor networks 2365

#### CAC

Modeling end-to-end QoS management and real time agreement protocols for resource reservation for multimedia mobile radio network 1953

# Cache invalidation strategy

Cache invalidation strategies for internet-based mobile ad hoc networks 1854

#### Call admission control

Bandwidth estimation for multiplexed videos using multinomial model 269

#### Call admission control

Parametric mobility support dynamic resource reservation and call admission control scheme for cellular multimedia communications 233

# Call control

OSA/Parlay-based middleware architecture and performance analysis for homogeneous service provision in Next Generation Networks 564

# Call processing

Load sharing in Call Server clusters 3027
Call Server

#### Load sharing in Call Server clusters 3027

Call Server clusters
Load sharing in Call Server clusters 3027

#### Capacity

Cross-layer modeling of capacity in wireless networks: Application to UMTS/HSDPA, IEEE802.11 WLAN and IEEE802.16 WiMAX 3384

#### Capacity

Evaluation of all one-to-many reliabilities for acyclic multistate-node distributed computing system under cost and capacity constraints 3796

# Capacity

Modeling of streaming and elastic flow integration in OFDMA-based IEEE802.16 WiMAX 3644

#### Capacity

WLAN VoIP capacity allocation using an adaptive voice packetization server 2661

# Captured frame

Captured-frame matching schemes for scalable inputqueued packet switches 2149

#### cdma2000 1x EV-DO

Channel-aware VoIP packet scheduling in cdma2000 1x EV-DO networks 2284

#### Cell layout

Traffic modeling in wireless mobile systems by means of ring and toroidal cell layouts: Performance comparison and validation against measurement data 1116

#### Cellular communication

Performance analysis of an adaptive handoff algorithm based on distance information 1278

#### Cellular genetic algorithm

A cellular multi-objective genetic algorithm for optimal broadcasting strategy in metropolitan MANETs 685

# Cellular MPLS networks

QoS provisioning by EFuNNs-based handoff planning in cellular MPLS networks 2676

#### Cellular network design

Designing cellular networks using a parallel hybrid metaheuristic on the computational grid 698

#### Cellular networks

Analytical modeling of a time-threshold based bandwidth allocation scheme for cellular networks 1036

#### Cellular networks

Mobility management in all-IP two-tier cellular networks 3442

#### Cellular networks

Parametric mobility support dynamic resource reservation and call admission control scheme for cellular multimedia communications 233

# Cellular networks

Time efficient heuristics for cell-to-switch assignment in quasi-static/dynamic location area planning of mobile cellular networks 326

#### Channel management

A novel channel assignment scheme for improving channel reuse efficiency in multi-channel ad hoc wireless networks 3416

# Channel mapping/multiplexing

Novel radio resource allocation strategy for multimedia content delivery over satellite multicast/broadcast systems 1870

#### Channel reuse

A novel channel assignment scheme for improving channel reuse efficiency in multi-channel ad hoc wireless networks 3416

#### Channel scheduling

Performance of OBS techniques under self-similar traffic based on various burst assembly techniques 315

# Channel side information

Performance of FH/MFSK systems with readable erasures 1538

#### Charging

A platform for charging, billing, and accounting in future mobile networks 516

# Classification

A latent class modeling approach to detect network intrusion 93

#### Cluster

An Accelerated IEEE 802.11 Handoff Process Based on the Dynamic Cluster Chain Method 1383

#### Cluster

An efficient cluster-based multi-channel management protocol for wireless Ad Hoc networks 1742

#### Cluster

How much energy saving does topology control offer for wireless sensor networks? – A practical study 2867

# Cluster roaming key

An Accelerated IEEE 802.11 Handoff Process Based on the Dynamic Cluster Chain Method 1383

#### Cluster-based architecture

Providing distributed certificate authority service in clusterbased mobile ad hoc networks 2442

#### Cluster-based routing

Reliable transmission of multimedia streaming using a connection prediction scheme in cluster-based ad hoc networks 440

#### Clustered sensor networks

A cross-layer transmission scheduling scheme for wireless sensor networks 2987

#### Clustering

A biologically-inspired clustering protocol for wireless sensor networks 2786

# Clustering

An efficient clustering scheme for large and dense mobile ad hoc networks (MANETs) 5

# Clustering

Fault-resilient sensing in wireless sensor networks 2375

#### Clustering

Key management for long-lived sensor networks in hostile environments 1964

#### Clustering algorithms

A survey on clustering algorithms for wireless sensor networks 2826

#### Clustering and heuristics

Time efficient heuristics for cell-to-switch assignment in quasi-static/dynamic location area planning of mobile cellular networks 326

# Clustering protocols

PEACH: Power-efficient and adaptive clustering hierarchy protocol for wireless sensor networks 2842

# Coexistence

Coexistence of wireless LANs and Bluetooth networks in mutual interference environment: An integrated analysis 192

#### Coexistence

Practical channel state aware and cooperative packet scheduling disciplines for coordinating colocated Bluetooth and IEEE 802.11b devices 1569

#### Cognitive networks

A management scheme for distributed cross-layer reconfigurations in the context of cognitive B3G infrastructures 3807

#### Collision avoidance

FARE: An efficient integrated MAC protocol for differentiated services in WDM metro rings 1315

# Collision detection

Novel collision detection scheme and its applications for IEEE 802.11 wireless LANs 1350

# Combinatorial optimization problem

Managing the power resources of sensor networks with performance considerations 1122

#### Combined input and crosspoint queueing switches

Quality of service provision in combined input and crosspoint queued switches without output queueing match 830

#### Communication networks

A truncated bivariate generalized Pareto distribution 1926

#### Communication networks

A truncated Pareto distribution 1

# Communication protocol

A novel channel assignment scheme for improving channel reuse efficiency in multi-channel ad hoc wireless networks 3416

#### **Communication systems**

Simulating mobile ad hoc networks in city scenarios 1466

#### Communication void

On-demand Geographic Forwarding for data delivery in wireless sensor networks 2954

#### Communications

Metaheuristics for optimization problems in computer communications 656

# Communications/networking and information technology

On application-level load balancing in FastReplica 3218

#### Complexity

A scalability comparison of GST and SST MANET multicast routing algorithms 3851

#### Computational viewpoint

Architectural framework for wireless mobile ad hoc networks (AF WMANETs) 178

# Computer networks

An agent based and biological inspired real-time intrusion detection and security model for computer network operations 2649

#### Computer security

A latent class modeling approach to detect network intrusion 93

# Computers

Metaheuristics for optimization problems in computer communications 656

# Concurrent multipath transfer

Concurrent multipath communication for real-time traffic 3307

# Concurrent multipath transfer

Performance implications of a bounded receive buffer in concurrent multipath transfer 818

# **Congestion characteristics**

Reduction of queue oscillation in the next generation Internet routers 3881

# Congestion control

Active queue management algorithm considering queue and load states 886

#### Congestion control

Instability effects of two-way traffic in a TCP/AQM system 2172

# Congestion control

RaQ: A robust active queue management scheme based on rate and queue length 1731

# Congestion control

Seamless transport service selection by deploying a middleware 630

# **Congestion control**

Stability analysis of a novel exponential-RED model with heterogeneous delays 1058

#### **Congestion control**

TCP-friendly congestion control to guarantee smoothness by Slack Term 341

# Congestion mitigation

Hop-count based probabilistic packet dropping: Congestion mitigation with loss rate differentiation 3859

#### Connected dominating sets

Quorum and connected dominating sets based location service in wireless ad hoc, sensor and actuator networks 3627

#### Connection probability

Reliable transmission of multimedia streaming using a connection prediction scheme in cluster-based ad hoc networks 440

#### Connectionist learning

Predictive connectionist approach for VoD bandwidth management 2236

#### **Connectivity costs**

Flow management for QoS-controlled 'data connectivity' provisioning 1165

# Consensus

Modeling end-to-end QoS management and real time agreement protocols for resource reservation for multimedia mobile radio network 1953

#### Conservative bandwidth allocation

A conservative approach to adaptive call admission control for QoS provisioning in multimedia wireless networks 249

# Consistency

An efficient update propagation algorithm for P2P systems 1106

# **Constrained Equivalent Delay**

An energy-efficient real-time routing protocol for sensor networks 2274

#### **Content distribution**

Design of a peer-to-peer system for optimized content replication 3107

#### **Contention control**

Reliable bursty convergecast in wireless sensor networks 2560

# Context interpretation

Wireless sensor and actor networks context interpretation for the emergency preparedness class of applications 2593

#### **Context Transfer**

Enhancing mobility management protocols to minimise AAA impact on handoff performance 608

# Context-aware

Efficient multimedia distribution architecture using anycast 288

#### Context-awareness

Agent based middleware infrastructure for autonomous context-aware ubiquitous computing services 577

# Continuity constraints

Routing wavelength and time-slot reassignment algorithms for TDM based optical WDM networks 3491

#### Contro

A P2P technology middleware architecture enabling usercentric services deployment on low-cost embedded networked devices 527

# Control theory

RaQ: A robust active queue management scheme based on rate and queue length 1731

# Cooperation

Best neighbor strategy to enforce cooperation among selfish nodes in wireless ad hoc network 3721

#### Cooperative transmission

Efficient ARQ protocols for exploiting cooperative relaying in wireless sensor networks 2765

# Core selection

QoS-constrained core selection for group communication 1600

#### Core-based architecture

QoS-constrained core selection for group communication 1600

#### Cost

Evaluation of all one-to-many reliabilities for acyclic multistate-node distributed computing system under cost and capacity constraints 3796

#### Cost analysis

Cost analysis and optimization for IP multicast group management 1721

#### Coverage

An optimal coverage-preserving scheme for wireless sensor networks based on local information exchange 2708

#### Cross layer

Jointly rate and power control in contention based MultiHop Wireless Networks 2021

#### Cross-domain service infrastructure

OSDA: Open service discovery architecture for efficient cross-domain service provisioning 546

#### Cross-layer

Handover management based on the number of data frame retransmissions for VoWLAN 3257

# Cross-layer design

Cross-layer error-control with low-overhead ARQ for H.264 video transmission over wireless LANs 1476

#### Cross-layer design

Cross-layer modeling of capacity in wireless networks: Application to UMTS/HSDPA, IEEE802.11 WLAN and IEEE802.16 WiMAX 3384

# Cross-layer optimization

A management scheme for distributed cross-layer reconfigurations in the context of cognitive B3G infrastructures 3807

# Crosslayer interaction

Crosslayer firewall interaction as a means to provide effective and efficient protection at mobile devices 1487

# Cryptanalysis

Off-line password-guessing attack to Peyravian—Jeffries's remote user authentication protocol 52

# CSA

Time efficient heuristics for cell-to-switch assignment in quasi-static/dynamic location area planning of mobile cellular networks 326

#### CSI

A cross-layer transmission scheduling scheme for wireless sensor networks 2987

# CSMA/CA

Energy efficiency modeling for IEEE 802.11 DCF system without retry limits 856

# Data collection

A virtual infrastructure for large-scale wireless sensor networks 2853

# **Data collection**

Fault-resilient sensing in wireless sensor networks 2375

#### Data delivery

On-demand Geographic Forwarding for data delivery in wireless sensor networks 2954

#### **Data distribution**

Deployable multipath communication scheme with sufficient performance data distribution method 3285

#### Data mining

Adaptive clustering in wireless sensor networks by mining sensor energy data 2968

#### Data placement

An efficient data placement for query-set-based broadcasting in mobile environments 1075

# Data replication

Design of a peer-to-peer system for optimized content replication 3107

#### Data retrieval

Improving search efficiency using Bloom filters in partially connected ad hoc networks: A node-centric analysis 3000

#### Data-gathering scheme

DAR: An energy-balanced data-gathering scheme for wireless sensor networks 2812

#### DCCP

Seamless transport service selection by deploying a middleware 630

#### DCF

Energy efficiency modeling for IEEE 802.11 DCF system without retry limits 856

#### **DDVCA**

A fast and efficient multicast algorithm for QoS group communications in heterogeneous network 2225

# Deadlock detection

A deadlock detection mechanism for true fully adaptive routing in regular wormhole networks 1826

# Deadlock recovery

PEACH: Power-efficient and adaptive clustering hierarchy protocol for wireless sensor networks 2842

# **Delaunay Triangulation**

A Delaunay Triangulation based method for wireless sensor network deployment 2744

# Delay

An enhanced QoS CBT multicast routing protocol based on Genetic Algorithm in a hybrid HAP-Satellite system 3126

# Delay

Improving performance of transport protocols in multipath transferring schemes 3270

#### Delay

Trust-based security for wireless ad hoc and sensor networks 2413

# Delay tolerant network

Improving search efficiency using Bloom filters in partially connected ad hoc networks: A node-centric analysis 3000

# Delay-tolerant networking

Contact-based buffering for delay-tolerant ad hoc broadcasting 3144

# Delayed vacation queue

Cost analysis and optimization for IP multicast group management 1721

# Demotion

Fair early drop marker for improving TCP fairness in multiple domain DiffServ networks 1205

#### Denial-of-Service attack

Security flaws of remote user access over insecure networks 117

#### **Denial-of-Service attacks**

Detecting Denial-of-Service attacks using the wavelet transform 3203

#### Dependability

Towards characterizing the effectiveness of random mobility against actuation attacks 2546

#### **Design automation**

Case studies of network designs with technology considerations 3117

#### **Destination stripping**

Performance of multicast in WDM slotted ring networks 219

# **Detectors** generation

Anomaly detection in TCP/IP networks using immune systems paradigm 740

#### **DFLCA**

Dynamic frame length channel assignment in wireless multihop ad hoc networks 3832

#### Differentiated service

A mini-bandwidth guaranteed and differentiated service supporting bandwidth allocation algorithm for Multimedia Group Communication 465

# Differentiated service

Provision of differentiated performance in Optical Burst Switching networks based on burst assembly processes 3449

### Differentiated services

Fair early drop marker for improving TCP fairness in multiple domain DiffServ networks 1205

# Differentiated survivability

Spare capacity allocation and optimisation in a distributed GMPLS-based IP/WDM mesh network 3085

#### Diffserv

A fair bandwidth distribution mechanism in a Diffserv network 358

#### DiffServ

An integrated end-to-end QoS anycast routing on DiffServ networks 1406

#### DiffServ

An objective-oriented service model for VoIP overlay networks over DiffServ/MPLS networks 3055

#### Diffsen

End-to-end quality of service provisioning through an integrated management system for multimedia content delivery 638

#### DiffServ

Refined assured forwarding framework for differentiated services architecture 3841

#### **Digital** certificate

Design and implementation of wireless PKI technology suitable for mobile phone in mobile-commerce 893

#### Direction-based localization scheme (DLS)

Distributed direction-based localization in wireless sensor networks 1424

#### Discrete space

Modeling and simulating coverage in sensor networks 1029

# Distributed algorithm

Power control based topology construction for the distributed wireless sensor networks 2774

#### Distributed CA services

Providing distributed certificate authority service in clusterbased mobile ad hoc networks 2442

#### Distributed Coordination Function (DCF) algorithm

Adjustment mechanism for the IEEE 802.11 contention window: An efficient bandwidth sharing scheme 2686

#### Distributed network control

Distributed network control for establishing reliabilityconstrained least-cost lightpaths in WDM Mesh networks 1546

#### Distributed optimization

Fair resource allocation in peer-to-peer networks (extended version) 3046

#### Distributed reservation

A distributed advance reservation system for interconnected slotted optical networks: Design and simulations 1142

#### Distributed sensor systems

On efficient deployment of sensors on planar grid 2721

#### Distributed virtual environments

A genetic approach for adding QoS to distributed virtual environments 731

# **Diversity**

Efficient ARQ protocols for exploiting cooperative relaying in wireless sensor networks 2765

#### **Diversity handling**

DiGA: Population diversity handling genetic algorithm for QoS-aware web services selection 1082

# Dominance probability

Two additive-constrained path selection in the presence of inaccurate state information 2096

# **Dominating set**

Fast distributed dominating set based routing in large scale MANETs 2880

# **DoS-resilient**

Efficient security mechanisms for overlay multicast based content delivery 793

# **DoS-tolerant**

A DoS and fault-tolerant authentication protocol for group communications in ad hoc networks 2428

# DSR

A low overhead dynamic route repairing mechanism for mobile ad hoc networks 1152

# **Dual-link failures**

Spare capacity allocation and optimisation in a distributed GMPLS-based IP/WDM mesh network 3085

# **Dual-mode wireless access**

Practical channel state aware and cooperative packet scheduling disciplines for coordinating colocated Bluetooth and IEEE 802.11b devices 1569

# **Dummynet**

Analytical and experimental evaluation of TCP with an Additive Increase Smooth Decrease (AISD) strategy 479

# **Duty cycle**

Guaranteeing the network lifetime in wireless sensor networks: A MAC layer approach 2532

# DVB

End-to-end quality of service provisioning through an integrated management system for multimedia content delivery 638

#### **DVB-RCS**

An enhanced QoS CBT multicast routing protocol based on Genetic Algorithm in a hybrid HAP–Satellite system 3126

#### DVBMT

A fast and efficient multicast algorithm for QoS group communications in heterogeneous network 2225

#### Dynamic authentication

Adaptive security design with malicious node detection in cluster-based sensor networks 2385

#### Dynamic changes in QoS

Flow management for QoS-controlled 'data connectivity' provisioning 1165

#### Dynamic fast handoff

TLMM: MIP-based Three Level Mobility Model 1244

#### Dynamic programming

An optimal solution for caching multimedia objects in transcoding proxies 1802

# Dynamic programming

Proxy location for minimizing delivery delay in HRM networks 2162

#### Dynamic provisioning

Heuristic and optimal techniques for light-trail assignment in optical ring WDM networks 990

#### **Dynamic QoS**

Performance analysis of a dynamic QoS scheme in optical label-switched networks 3012

#### Dynamic resource allocation

Dynamic radio resource allocation for 3G and beyond mobile wireless networks 41

#### Dynamic route repairing

A low overhead dynamic route repairing mechanism for mobile ad hoc networks 1152

### Dynamic source routing (DSR)

Enhancing real-time video streaming over mobile ad hoc networks using multipoint-to-point communication 1754

#### Dynamic traffic

Coupled-layer type waveband path design method corresponding to traffic demand fluctuation 965

#### **Dynamic Traffic Grooming**

Study of signaling effects on Dynamic Traffic Grooming in IP/MPLS over WDM network 3586

# 802.11e

Modified EDCF to improve the performance of IEEE 802.11e WLAN 841

# e-Business server performance

Evaluation of the effect of SSL overhead in the performance of e-business servers operating in B2B scenarios 3063

#### e-Payment

Improving authentication of remote card transactions with mobile personal trusted devices 1697

#### E-RED

Stability analysis of a novel exponential-RED model with heterogeneous delays 1058

#### Early bandwidth scale-down

A conservative approach to adaptive call admission control for QoS provisioning in multimedia wireless networks 249

#### **Effective Transmission**

An energy-efficient real-time routing protocol for sensor networks 2274

# **Electronic Product Code network**

Architecture design and performance evaluation of RFID object tracking systems 2070

#### End-to-end bandwidth guarantees

Inter-autonomous system provisioning for end-to-end bandwidth guarantees 3757

#### **End-to-end QoS**

End-to-end quality of service provisioning through an integrated management system for multimedia content delivery 638

#### **End-to-end QoS**

Modeling end-to-end QoS management and real time agreement protocols for resource reservation for multimedia mobile radio network 1953

#### **Energy**

An optimal coverage-preserving scheme for wireless sensor networks based on local information exchange 2708

# Energy aware design

A survey on clustering algorithms for wireless sensor networks 2826

#### **Energy balancing**

DAR: An energy-balanced data-gathering scheme for wireless sensor networks 2812

#### **Energy efficiency**

Energy efficiency modeling for IEEE 802.11 DCF system without retry limits 856

# **Energy efficiency**

Energy efficient multicast routing in ad hoc wireless networks 3746

#### **Energy efficiency**

Energy-aware location error handling for object tracking applications in wireless sensor networks 1443

# **Energy efficiency**

Fast distributed dominating set based routing in large scale MANETs 2880

# **Energy efficiency**

QoS and energy efficiency in network wide broadcasting: A MAC layer perspective 3705

#### **Energy efficient**

Energy-efficient geographic multicast routing for Sensor and Actuator Networks 2519

#### **Energy harvesting**

Energetic sustainability of routing algorithms for energyharvesting wireless sensor networks 2976

#### **Energy-awareness**

Energy-aware topology control for wireless sensor networks using memetic algorithms 2753

#### **Energy-efficient protocols**

O(1)-Reception routing for sensor networks 2603

# Enhance distributed coordination function (EDCF)

Modified EDCF to improve the performance of IEEE 802.11e WLAN 841

# **Enterprise viewpoint**

Architectural framework for wireless mobile ad hoc networks (AF WMANETs) 178

# **Environment adaptation**

An adaptive packet scheduling algorithm for efficient downlink bandwidth allocation in UWB based wireless infrastructure networks 2087

# **Error control**

Reliable bursty convergecast in wireless sensor networks 2560

# **Error-control**

Cross-layer error-control with low-overhead ARQ for H.264 video transmission over wireless LANs 1476

#### **Evaluation**

Enhancing mobility management protocols to minimise AAA impact on handoff performance 608

#### EVDF

A new scheduling scheme for high-speed packet networks: Earliest-virtual-deadline-first 2291

# **Evenly balancing**

Improved balancing heuristics for optimizing shortest path routing 1513

#### **Event ordering**

Wireless sensor and actor networks context interpretation for the emergency preparedness class of applications 2593

# **Evolutionary approach**

Case studies of network designs with technology considerations 3117

# **Evolutionary approach**

Modeling and simulating coverage in sensor networks 1029

#### **Evolutionary stable strategy**

Best neighbor strategy to enforce cooperation among selfish nodes in wireless ad hoc network 3721

# **Evolving Fuzzy Neural Networks**

QoS provisioning by EFuNNs-based handoff planning in cellular MPLS networks 2676

# Experimentation with real networks and testbeds

Reliable bursty convergecast in wireless sensor networks 2560

#### **Facsimile**

The packet-based networks performance requirements for real-time facsimile transmission 1289

#### Failover

Failover, load sharing and server architecture in SIP telephony 927

#### Fair bandwidth sharing

Adjustment mechanism for the IEEE 802.11 contention window: An efficient bandwidth sharing scheme 2686

#### Fair grid scheduling

Adjusted fair scheduling and non-linear workload prediction for QoS guarantees in grid computing 499

#### **Fairness**

A fair bandwidth distribution mechanism in a Diffserv network 358

#### **Fairness**

An adaptive packet scheduling algorithm for efficient downlink bandwidth allocation in UWB based wireless infrastructure networks 2087

#### **Fairness**

Fair early drop marker for improving TCP fairness in multiple domain DiffServ networks 1205

#### **Fairness**

Fair resource allocation in peer-to-peer networks (extended version) 3046

#### **Fairness**

Feedback-based offset time selection for end-to-end proportional QoS provisioning in WDM optical burst switching networks 904

#### **Fairness**

Power control and fairness MAC mechanisms for 802.11 WLANs 1527

#### **Fairness**

Refined assured forwarding framework for differentiated services architecture 3841

# Fairness comparison metric

Fairness comparison of FAST TCP and TCP Reno 1375

#### Fairness control

FARE: An efficient integrated MAC protocol for differentiated services in WDM metro rings 1315

#### False data injection

Resilience of sink filtering scheme in wireless sensor networks 55

#### **False Timeout**

Interleaved Traffic Splitting: A promising technique to solve False Timeout 3480

#### Fast handoff

Handoff latency analysis of mobile IPv6 protocol variations 849

#### Fast handover

A new flow-based fast handover method for Mobile IPv6 network with route optimization 3870

#### Fast long-distance network

S-shaped TCP: A transport protocol for improving the performance of TCP in fast long-distance networks 33

#### Fast packet scheduling

An adaptive packet scheduling algorithm for efficient downlink bandwidth allocation in UWB based wireless infrastructure networks 2087

#### **FAST TCP**

Fairness comparison of FAST TCP and TCP Reno 1375

# **Fault-resilient**

Fault-resilient sensing in wireless sensor networks 2375

#### **Fault-tolerance**

Distributed network control for establishing reliabilityconstrained least-cost lightpaths in WDM Mesh networks 1546

# Fault-tolerant

A DoS and fault-tolerant authentication protocol for group communications in ad hoc networks 2428

#### FFHMIPv6

A new flow-based fast handover method for Mobile !Pv6 network with route optimization 3870

# Fieldbus networks

Engineering PROFIBUS networks with heterogeneous transmission media 17

# File replica

An efficient update propagation algorithm for P2P systems 1106

# Filter decomposition

Parallel tree search: An algorithmic approach for multi-field packet classification 302

#### Firewall management plane

Crosslayer firewall interaction as a means to provide effective and efficient protection at mobile devices 1487

#### Fisheye

Fisheye zone routing protocol: A multi-level zone routing protocol for mobile ad hoc networks 261

#### Floorplan

Modeling and simulating coverage in sensor networks 1029

#### Flow assignment

On the problem of capacity allocation and flow assignment in self-healing ATM networks 3169

#### Flow level

Cross-layer modeling of capacity in wireless networks: Application to UMTS/HSDPA, IEEE802.11 WLAN and IEEE802.16 WiMAX 3384

#### Forward error correction

Directional geographical routing for real-time video communications in wireless sensor networks 3368

#### Forward error correction

Packet loss resilience using unequal forward error correction assignment for video transmission over communication networks 3676

#### Forward secrecy

A DoS and fault-tolerant authentication protocol for group communications in ad hoc networks 2428

#### Frame eligibility

Captured-frame matching schemes for scalable input-queued packet switches 2149

# Frame retransmission

Handover management based on the number of data frame retransmissions for VoWLAN 3257

# Frequency assignment

Mobile computing: Opportunities for optimization research 670

# Frequency hopping (FH)

Performance of FH/MFSK systems with readable erasures 1538

#### Fresh traffic

Traffic modeling in wireless mobile systems by means of ring and toroidal cell layouts: Performance comparison and validation against measurement data 1116

# Fusion

A cross-layer transmission scheduling scheme for wireless sensor networks 2987

#### Fuzzy

A new approach to intrusion detection based on an evolutionary soft computing model using neuro-fuzzy classifiers 2201

# Fuzzy set threshold

Space priority queue with fuzzy set threshold 2301

# G.711

The packet-based networks performance requirements for real-time facsimile transmission 1289

#### 4G

A mobility management model based on users' mobility profiles for IPv6 networks 66

#### 4G

Adaptive resource reservation schemes for proportional DiffServ enabled fourth-generation mobile communications system 1613

# **Gateway Mobility Agent**

TLMM: MIP-based Three Level Mobility Model 1244

#### **General Packet Radio Service**

Modeling and analysis of mobility management state of packet-switched (PS) services in GPRS 166

#### Genetic algorithm

A genetic algorithm for solving virtual topology configuration transition problem in WDM network 767

#### Genetic algorithm

A hybrid method for solving ARWA problem on WDM network 385

# Genetic algorithm

A new approach to intrusion detection based on an evolutionary soft computing model using neuro-fuzzy classifiers 2201

#### Genetic algorithm

A TDMA scheduling scheme for many-to-one communications in wireless sensor networks 863

#### Genetic algorithm

DiGA: Population diversity handling genetic algorithm for QoS-aware web services selection 1082

# Genetic algorithm

On efficient deployment of sensors on planar grid 2721

#### Genetic algorithms

A genetic approach for adding QoS to distributed virtual environments 731

# **Genetic Algorithms**

An enhanced QoS CBT multicast routing protocol based on Genetic Algorithm in a hybrid HAP-Satellite system 3126

#### Genetic algorithms

Applications of genetic algorithms to optimal multilevel design of MPLS-based networks 2010

# Genetic algorithms

Energy-aware topology control for wireless sensor networks using memetic algorithms 2753

#### Genetic evolutionary algorithm

Genetic evolutionary algorithm for static traffic grooming to SONET over WDM optical networks 3392

# Geo-encryption

Geo-encryption protocol for mobile networks 2510

# Geographic forwarding

On-demand Geographic Forwarding for data delivery in wireless sensor networks 2954

# Geographic information system (GIS)

Location based services using geographical information systems 3154

#### Geographic information systems

Simulating mobile ad hoc networks in city scenarios 1466

# Geographic multicast

Demand-scalable geographic multicasting in wireless sensor networks 2931

# 60 GHz

Radio-over-Fiber based architecture for seamless wireless indoor communication in the 60 GHz band 3598

# Global navigation satellite system (GNSS)

Location based services using geographical information systems 3154

# Global positioning system (GPS)

Cache invalidation strategies for internet-based mobile ad hoc networks 1854

# Global positioning system (GPS) and Wireless networks

Location based services using geographical information systems 3154

#### Global stability

Local and global stability of TCP-newReno/RED with many flows 1091

# **GMPLS**

Distributed inter-domain lightpath provisioning in the presence of wavelength conversion 3662

#### GMPLS

Hierarchical routing in multi-domain optical networks 122

# **GMPLS**

Spare capacity allocation and optimisation in a distributed GMPLS-based IP/WDM mesh network 3085

#### **GPS-based encryption**

Geo-encryption protocol for mobile networks 2510

#### Graph theory

Guaranteed on-demand discovery of node-disjoint paths in ad hoc networks 2917

#### **Grid computing**

Designing cellular networks using a parallel hybrid metaheuristic on the computational grid 698

# Grid-enabled networking middleware

Adjusted fair scheduling and non-linear workload prediction for QoS guarantees in grid computing 499

#### Group communication

Demand-scalable geographic multicasting in wireless sensor networks 2931

#### Group key management

Efficient security mechanisms for overlay multicast based content delivery 793

#### **Group management**

Cost analysis and optimization for IP multicast group management 1721

#### Group shared tree

A scalability comparison of GST and SST MANET multicast routing algorithms 3851

#### Grouping genetic algorithm

A hybrid grouping genetic algorithm for the registration area planning problem 2180

#### H.263 video encoding

On providing dynamic resource allocation based on multimedia traffic prediction in satellite systems 404

#### H.264

Cross-layer error-control with low-overhead ARQ for H.264 video transmission over wireless LANs 1476

# H.26L video

Directional geographical routing for real-time video communications in wireless sensor networks 3368

#### Hand-off

Radio resource management for a mobile network with TD-CDMA 132

#### Handoff

An Accelerated IEEE 802.11 Handoff Process Based on the Dynamic Cluster Chain Method 1383

#### Handof

Analytical modeling of a time-threshold based bandwidth allocation scheme for cellular networks 1036

#### Handoff

DualMAC: A soft handoff mechanism for real-time communications in secured WLANs 1785

#### Handoff

Low-latency handoff inter-WLAN IP mobility with broadband network control 750

# Handoff

Performance analysis of an adaptive handoff algorithm based on distance information 1278

#### Handoff

Priority forwarding for improving the TCP performance in mobile IP based networks with packet buffering 1337

# Handoff

Time efficient heuristics for cell-to-switch assignment in quasi-static/dynamic location area planning of mobile cellular networks 326

#### Handoff traffic

Traffic modeling in wireless mobile systems by means of ring and toroidal cell layouts: Performance comparison and validation against measurement data 1116

#### Handover

A mobility management model based on users' mobility profiles for IPv6 networks 66

#### Handove

An RSVP based seamless resource reservation scheme for wireless mobile networks 81

#### Handove

Dynamic transport layer handover for heterogeneous communication environments 3232

#### Handover

Handoff multiple queue model in microcellular networks 396

#### HAP

An enhanced QoS CBT multicast routing protocol based on Genetic Algorithm in a hybrid HAP–Satellite system 3126

#### Harmonic

An Interleaving Slotted-PolyHarmonic-Staircase Broadcasting Protocol for Near Video-on-Demand Services 807

#### Hash

Off-line password-guessing attack to Peyravian-Jeffries's remote user authentication protocol 52

#### Hello protocol

A lightweight implementation of RSVP-TE protocol for MPLS-TE signaling 1199

#### Heterogeneous content adaptation

MPEG-21 digital items to support integration of heterogeneous multimedia content 592

#### Heterogeneous delays

Stability analysis of a novel exponential-RED model with heterogeneous delays 1058

# Heterogeneous network

A fast and efficient multicast algorithm for QoS group communications in heterogeneous network 2225

#### Heterogeneous networks

Dynamic transport layer handover for heterogeneous communication environments 3232

#### Heterogeneous networks

Exploring TCP Parallelisation for performance improvement in heterogeneous networks 3321

# Heterogeneous wireless networks

RSVP extensions for real-time services in heterogeneous wireless networks 2248

#### Heuristic algorithm

Valiant load-balanced robust routing algorithm for multigranularity connection requests in traffic-grooming WDM mesh networks 3498

#### Heuristics

Efficient Routing Heuristics for Internet Traffic Engineering 1942

#### Hierarchical

Handoff latency analysis of mobile IPv6 protocol variations 849

#### Hierarchical network architecture

Architecture design and performance evaluation of RFID object tracking systems 2070

#### Hierarchical reliable multicast

Proxy location for minimizing delivery delay in HRM networks 2162

#### Hierarchical routing

A QoS multicast routing protocol for clustering mobile ad hoc networks 1641

#### Hierarchical trust model

Building a virtual hierarchy to simplify certification path discovery in mobile ad-hoc networks 1498

#### High speed transport protocol

S-shaped TCP: A transport protocol for improving the performance of TCP in fast long-distance networks 33

# High-speed networks

Performance analysis and comparison of interrupt-handling schemes in gigabit networks 3425

#### HMIPv6

FH-RSVP scheme for intra-site handover in hierarchical mobile IPv6 networks 416

#### Home

A P2P technology middleware architecture enabling usercentric services deployment on low-cost embedded networked devices 527

# Homogeneous service provision

OSA/Parlay-based middleware architecture and performance analysis for homogeneous service provision in Next Generation Networks 564

#### Hop count

Hop-count based probabilistic packet dropping: Congestion mitigation with loss rate differentiation 3859

#### Hose model

Extensions to P2MP RSVP-TE for VPN-specific state provisioning with fair resource sharing 3736

#### Hose model

Valiant load-balanced robust routing algorithm for multigranularity connection requests in traffic-grooming WDM mesh networks 3498

#### Hostile environments

Key management for long-lived sensor networks in hostile environments 1964

# **HVS** method

Predictive connectionist approach for VoD bandwidth management 2236

#### Hybrid cost

Time efficient heuristics for cell-to-switch assignment in quasi-static/dynamic location area planning of mobile cellular networks 326

# Hybrid forwarding

A hybrid meshed multipath forwarding scheme in wireless ad hoc networks 3346

# Hybrid metaheuristics

Designing cellular networks using a parallel hybrid metaheuristic on the computational grid 698

# Hysteresis value

Performance analysis of an adaptive handoff algorithm based on distance information 1278

#### ICMP

On evaluating the differences of TCP and ICMP in network measurement 428

#### **IEEE 802.11**

Energy efficiency modeling for IEEE 802.11 DCF system without retry limits 856

#### **IEEE 802.11**

WLAN VoIP capacity allocation using an adaptive voice packetization server 2661

#### IEEE 802,11b

Practical channel state aware and cooperative packet scheduling disciplines for coordinating colocated Bluetooth and IEEE 802.11b devices 1569

#### **IEEE 802.15.4**

Wireless sensor networks: A survey on the state of the art and the 802.15.4 and ZigBee standards 1655

#### **IEEE 802.16**

Performance evaluation of scheduling in IEEE 802.16 based wireless mesh networks 782

#### **IEEE 802.16**

Tiny MAP: An efficient MAP in IEEE 802.16/WiMAX broadband wireless access systems 2122

#### IEEE802.1

Stochastic modelling and analysis of 802.11 DCF with heterogeneous non-saturated nodes 3652

#### IEEE802.11 WLAN

Cross-layer modeling of capacity in wireless networks: Application to UMTS/HSDPA, IEEE802.11 WLAN and IEEE802.16 WiMAX 3384

#### IEEE802.11b

Coexistence of wireless LANs and Bluetooth networks in mutual interference environment: An integrated analysis 192

# IEEE802.16

Modeling of streaming and elastic flow integration in OFDMA-based IEEE802.16 WiMAX 3644

#### IEEE802.16 WIMAX

Cross-layer modeling of capacity in wireless networks: Application to UMTS/HSDPA, IEEE802.11 WLAN and IEEE802.16 WiMAX 3384

#### ILP

Study of signaling effects on Dynamic Traffic Grooming in IP/MPLS over WDM network 3586

#### Impact of security on performance

Evaluation of the effect of SSL overhead in the performance of e-business servers operating in B2B scenarios 3063

#### Infinitesimal Perturbation Analysis

Adaptive rate allocation and resource planning for service level agreement maintenance in satellite communications 3179

# Information viewpoint

Architectural framework for wireless mobile ad hoc networks (AF WMANETs) 178

# Infrastructure

Radio-over-Fiber based architecture for seamless wireless indoor communication in the 60 GHz band 3598

#### Infrastructure networks

Analysis of the effect of security on data and voice traffic in WLAN 2468

# Input-queued switch

Captured-frame matching schemes for scalable input-queued packet switches 2149

# Integrated Management System (IMS)

End-to-end quality of service provisioning through an integrated management system for multimedia content delivery 638

# Integrated services

Cross-layer modeling of capacity in wireless networks: Application to UMTS/HSDPA, IEEE802.11 WLAN and IEEE802.16 WiMAX 3384

#### Inter-domain DWDM routing

Distributed inter-domain lightpath provisioning in the presence of wavelength conversion 3662

#### Inter-domain DWDM routing

Hierarchical routing in multi-domain optical networks 122

#### Inter-domain routing

Modified flap damping mechanism to improve inter-domain routing convergence 1588

# Inter-domain signaling

A distributed advance reservation system for interconnected slotted optical networks: Design and simulations 1142

#### Inter-vehicular communications

VARON: Vehicular Ad hoc Route Optimisation for NEMO 1765

#### Interactive multimedia applications

An M-time inheriting transmission strategy for interactive multimedia applications in wireless networks 1187

#### Intercluster traffic

Medium-access control protocols for WDM-based optical access networks with passive-star clusters interconnected by a backbone ring 3614

# Interconnection networks

A deadlock detection mechanism for true fully adaptive routing in regular wormhole networks 1826

# Interference

Coexistence of wireless LANs and Bluetooth networks in mutual interference environment: An integrated analysis 192

#### Interference

Power control and fairness MAC mechanisms for 802.11 WLANs 1527

#### Interleaving

An Interleaving Slotted-PolyHarmonic-Staircase Broadcasting Protocol for Near Video-on-Demand Services 807

# Internet

Fair early drop marker for improving TCP fairness in multiple domain DiffServ networks 1205

#### Internet measurements

Reorder buffer-occupancy density and its application for measurement and evaluation of packet reordering 1980

# Internet performance

Reorder buffer-occupancy density and its application for measurement and evaluation of packet reordering 1980

# Internet routing

Improved balancing heuristics for optimizing shortest path routing 1513

#### Internet-based mobile ad hoc networks

Cache invalidation strategies for internet-based mobile ad hoc networks 1854

#### Interoperability in heterogeneous networks

Engineering PROFIBUS networks with heterogeneous transmission media 17

# Interrupt coalescing

Performance analysis and comparison of interrupt-handling schemes in gigabit networks 3425

#### Interrupts

Performance analysis and comparison of interrupt-handling schemes in gigabit networks 3425

#### Intracluster traffic

Medium-access control protocols for WDM-based optical access networks with passive-star clusters interconnected by a backbone ring 3614

#### Intruder detection

An efficient intruder detection algorithm against sinkhole attacks in wireless sensor networks 2353

#### Intruder identification

An efficient intruder detection algorithm against sinkhole attacks in wireless sensor networks 2353

#### Intrusion detection

A latent class modeling approach to detect network intrusion 93

#### Intrusion detection

A new approach to intrusion detection based on an evolutionary soft computing model using neuro-fuzzy classifiers 2201

#### Intrusion detection

Detecting Denial-of-Service attacks using the wavelet transform 3203

#### Intrusion detection model

An agent based and biological inspired real-time intrusion detection and security model for computer network operations 2649

# Intrusion detection system

An ontology description for SIP security flaws 1367

# IP

End-to-end quality of service provisioning through an integrated management system for multimedia content delivery 638

#### IP lookup

Build shape-shifting tries for fast IP lookup in O(n) time 3787

#### IP mobility management

Enhancing mobility management protocols to minimise AAA impact on handoff performance 608

#### **IP Multicast**

Cost analysis and optimization for IP multicast group management 1721

#### IP traceback

Performance analysis of probabilistic packet marking in IPv6 3193

# IP traffic

Experimental validation of the ON-OFF packet-level model for IP traffic 975

#### IP-based cellular network

DIP-MIP: Distributed individual paging extension for mobile IP in IP-based cellular networks 1178

#### IPv6

Performance analysis of probabilistic packet marking in IPv6 3193

# JARA (Jumping Ant Routing Algorithm)

Jumping ant routing algorithm for sensor networks 2892

#### KDD Cup 99

A new approach to intrusion detection based on an evolutionary soft computing model using neuro-fuzzy classifiers 2201

#### Key graph

Efficient group key management for multi-privileged groups 2497

#### Key management

A survey of key management schemes in wireless sensor networks 2314

#### Key management

Key management for long-lived sensor networks in hostile environments 1964

# Landscape analysis

Landscape analysis for multicast routing 101

#### Latent class model

A latent class modeling approach to detect network intrusion 93

# Learning automata

A new high rate adaptive wireless data dissemination scheme 957

#### Leased network bandwidths

Flow management for QoS-controlled 'data connectivity' provisioning 1165

#### Lifetime

DAR: An energy-balanced data-gathering scheme for wireless sensor networks 2812

#### Light-trail

Heuristic and optimal techniques for light-trail assignment in optical ring WDM networks 990

#### Lightpath

Study of signaling effects on Dynamic Traffic Grooming in IP/ MPLS over WDM network 3586

# Lightweight implementation

A lightweight implementation of RSVP-TE protocol for MPLS-TE signaling 1199

#### Link prediction

Reliable transmission of multimedia streaming using a connection prediction scheme in cluster-based ad hoc networks 440

# Link scheduling

Performance evaluation of scheduling in IEEE 802.16 based wireless mesh networks 782

# Link sharing

Topology-aware overlay path probing 1994

#### Link-based approach

On the problem of capacity allocation and flow assignment in self-healing ATM networks 3169

# Linux

Practical channel state aware and cooperative packet scheduling disciplines for coordinating colocated Bluetooth and IEEE 802.11b devices 1569

#### Linux

The performance analysis of linux networking - Packet receiving 1044

# Lipschitz regularity

Detecting Denial-of-Service attacks using the wavelet transform 3203

# Load balancing

Adaptive arrival rate dependent traffic balancing with redundancy 1220

#### Load balancing

Directional geographical routing for real-time video communications in wireless sensor networks 3368

#### Load balancing

Performance analysis of adaptive multipath load balancing in WDM–LOBS networks 3460

#### Load balancing

Performance implications of a bounded receive buffer in concurrent multipath transfer 818

#### Load balancing

Slotted Optical Burst Switching (SOBS) networks 3471

#### Load balancing

Time efficient heuristics for cell-to-switch assignment in quasi-static/dynamic location area planning of mobile cellular networks 326

#### Load scaling

Evaluation of network traffic workload scaling techniques 3096

#### Load sharing

Failover, load sharing and server architecture in SIP telephony 927

# Load sharing

Load sharing in Call Server clusters 3027

#### Load-balancing

QoS-aware Internet access schemes for wireless mobile ad hoc networks 369

# Local stability

Local and global stability of TCP-newReno/RED with many flows 1091

# Localization

Distributed direction-based localization in wireless sensor networks 1424

# Localization

Path planning of mobile landmarks for localization in wireless sensor networks 2577

# Localized routing

Demand-scalable geographic multicasting in wireless sensor networks 2931

# Location algorithm

GPS-less location algorithm for wireless sensor networks 2904

#### Location area partitioning

Time efficient heuristics for cell-to-switch assignment in quasi-static/dynamic location area planning of mobile cellular networks 326

# Location areas scheme

A Simulated Annealing approach for mobile location management 714

# Location based service (LBS)

Location based services using geographical information systems 3154

# Location management

Adaptive location update area design for wireless cellular networks under 2D Markov walk model 2060

# Location management

Mobile computing: Opportunities for optimization research 670

# Location service

Quorum and connected dominating sets based location service in wireless ad hoc, sensor and actuator networks 3627

#### Location update

Adaptive location update area design for wireless cellular networks under 2D Markov walk model 2060

#### Location update

Modeling and analysis of mobility management state of packet-switched (PS) services in GPRS 166

#### Location-based security

Geo-encryption protocol for mobile networks 2510

#### Long-tailed distributions

A truncated Pareto distribution 1

# Loss probability

Performance analysis and evaluation for multi-traffic networks with priority control 1562

#### Loss rate

Hop-count based probabilistic packet dropping: Congestion mitigation with loss rate differentiation 3859

#### Low pass filter

Analytical and experimental evaluation of TCP with an Additive Increase Smooth Decrease (AISD) strategy 479

#### LSP management

QoS provisioning by EFuNNs-based handoff planning in cellular MPLS networks 2676

#### MAC

DREAM: A system for detection and reaction against MAC layer misbehavior in ad hoc networks 1841

#### MAC

Energy efficiency modeling for IEEE 802.11 DCF system without retry limits 856

#### **MAC firewall**

Crosslayer firewall interaction as a means to provide effective and efficient protection at mobile devices 1487

#### MAC header

Tiny MAP: An efficient MAP in IEEE 802.16/WiMAX broadband wireless access systems 2122

#### **MAC** protocol

An efficient cluster-based multi-channel management protocol for wireless Ad Hoc networks 1742

# MAC protocol

On providing dynamic resource allocation based on multimedia traffic prediction in satellite systems 404

# MAC scheduling

Cross-layer modeling of capacity in wireless networks: Application to UMTS/HSDPA, IEEE802.11 WLAN and IEEE802.16 WiMAX 3384

# Machine learning

A latent class modeling approach to detect network intrusion 93

# Malicious attacks

Using overhearing technique to detect malicious packetmodifying attacks in wireless sensor networks 2342

#### MANET

Building a virtual hierarchy to simplify certification path discovery in mobile ad-hoc networks 1498

#### MANET

Contact-based buffering for delay-tolerant ad hoc broadcasting 3144

# MANET

Fisheye zone routing protocol: A multi-level zone routing protocol for mobile ad hoc networks 261

#### MANET

Jumping ant routing algorithm for sensor networks 2892

# MANETS

An efficient clustering scheme for large and dense mobile ad hoc networks (MANETs) 5

#### MANETS

Fast distributed dominating set based routing in large scale MANETs 2880

#### **MAODV** protocol

Performance evaluation of multicast ad hoc on-demand distance vector protocol 1931

#### MAP

Tiny MAP: An efficient MAP in IEEE 802.16/WiMAX broadband wireless access systems 2122

#### Markov chain

Emulating output queueing with parallel packet switches 3403

#### Markov chain

Stochastic modelling and analysis of 802.11 DCF with heterogeneous non-saturated nodes 3652

#### Markov chains

Analytical modeling of a time-threshold based bandwidth allocation scheme for cellular networks 1036

# Markov-modulated poisson process

Space priority queue with fuzzy set threshold 2301

#### 2D Markov walk model

Adaptive location update area design for wireless cellular networks under 2D Markov walk model 2060

#### Markovian arrival process

Space priority queue with fuzzy set threshold 2301

# M-ary frequency shift keying (MFSK)

Performance of FH/MFSK systems with readable erasures 1538

# M-time inheriting transmission strategy (MITS)

An *M*-time inheriting transmission strategy for interactive multimedia applications in wireless networks 1187

# Max-min fairness

Fairness comparison of FAST TCP and TCP Reno 1375

# Maximal clique Radio resource management for a mobile network with TD-

CDMA 132

# Maximum lifetime routing

O(1)-Reception routing for sensor networks 2603

# Maximum waiting time

An Interleaving Slotted-PolyHarmonic-Staircase Broadcasting Protocol for Near Video-on-Demand Services 807

# Maximum-lifetime multicast

Energy-aware multicasting in wireless ad hoc networks: A survey and discussion 2129

#### MBMS

Novel radio resource allocation strategy for multimedia content delivery over satellite multicast/broadcast systems 1870

# Mean waiting time

Handoff multiple queue model in microcellular networks 396

#### Measurement-based control

Adaptive rate allocation and resource planning for service level agreement maintenance in satellite communications 3179

# Medium access control (MAC)

A novel channel assignment scheme for improving channel reuse efficiency in multi-channel ad hoc wireless networks 3416

# Medium access control (MAC)

Guaranteeing the network lifetime in wireless sensor networks: A MAC layer approach 2532

# Medium access control (MAC) protocol

FARE: An efficient integrated MAC protocol for differentiated services in WDM metro rings 1315

# Memetic algorithms

Energy-aware topology control for wireless sensor networks using memetic algorithms 2753

# Meshed multipath

A hybrid meshed multipath forwarding scheme in wireless ad hoc networks 3346

# Meta-heuristic

A biologically-inspired clustering protocol for wireless sensor networks 2786

#### Metadata

MPEG-21 digital items to support integration of heterogeneous multimedia content 592

#### Metadata

New bluetooth interconnection methods: Overlaid Bluetooth Piconets (OBP) and Temporary Scatternets (TS) 2258

#### Metaheuristics

Designing cellular networks using a parallel hybrid metaheuristic on the computational grid 698

#### Metaheuristics

Metaheuristics for optimization problems in computer communications 656

# Metrics

Reorder buffer-occupancy density and its application for measurement and evaluation of packet reordering 1980

#### MG-OXC, Multi-granular optical cross-connect

A novel dynamic RWA algorithm with intelligent granularity regulation in multi-granular all-optical networks 3525

#### Middleware

Agent based middleware infrastructure for autonomous context-aware ubiquitous computing services 577

# Middleware

End-to-end quality of service provisioning through an integrated management system for multimedia content delivery 638

#### Middleware

Seamless transport service selection by deploying a middleware 630

# Middleware performance evaluation

OSA/Parlay-based middleware architecture and performance analysis for homogeneous service provision in Next Generation Networks 564

#### MIDP

A P2P technology middleware architecture enabling user-centric services deployment on low-cost embedded networked devices 527

# Minimum interference routing

Performance evaluation of minimum interference routing in network scenarios with protection requirements 3161

# Minimum-energy multicast

Energy-aware multicasting in wireless ad hoc networks: A survey and discussion 2129

#### MMORPG

An approach to achieve scalability through a structured peer-to-peer network for massively multiplayer online role playing games 3075

#### Mobile ad hoc network

AROD: An address autoconfiguration with address reservation and optimistic duplicated address detection for mobile ad hoc networks 1913

## Mobile ad hoc network

Experiences with node virtualization for scalable network emulation 943

#### Mobile ad hoc network

Providing distributed certificate authority service in cluster-based mobile ad hoc networks 2442

#### Mobile ad hoc networks

A cellular multi-objective genetic algorithm for optimal broadcasting strategy in metropolitan MANETs 685

#### Mobile ad hoc networks

Gathering-based routing protocol in mobile ad hoc networks 202

#### Mobile ad hoc networks

Performance evaluation of multicast ad hoc on-demand distance vector protocol 1931

#### Mobile ad hoc networks (MANETs)

Enhancing real-time video streaming over mobile ad hoc networks using multipoint-to-point communication 1754

#### Mobile ad hoc wireless access networks

QoS-aware Internet access schemes for wireless mobile ad hoc networks 369

# Mobile agent

An agent based and biological inspired real-time intrusion detection and security model for computer network operations 2649

#### Mobile agent

Trust-based security for wireless ad hoc and sensor networks 2413

#### Mobile agents

Webmages: An agent platform based on web services 538

#### Mobile communication

Simulating mobile ad hoc networks in city scenarios 1466

#### Mobile communication

Time efficient heuristics for cell-to-switch assignment in quasi-static/dynamic location area planning of mobile cellular networks 326

# **Mobile computing**

Mobile computing: Opportunities for optimization research 670

#### Mobile computing

Mobile object tracking in wireless sensor networks 1811

#### Mobile devices

Crosslayer firewall interaction as a means to provide effective and efficient protection at mobile devices 1487

#### Mobile IF

A hierarchical multicast protocol in mobile IPv6 networks 144

# Mobile IP

A mobility management model based on users' mobility profiles for IPv6 networks 66

# Mobile IP

DIP-MIP: Distributed individual paging extension for mobile IP in IP-based cellular networks 1178

#### Mobile IP

FH-RSVP scheme for intra-site handover in hierarchical mobile IPv6 networks 416

#### Mobile IP

Low-latency handoff inter-WLAN IP mobility with broadband network control 750

#### Mobile IP

Priority forwarding for improving the TCP performance in mobile IP based networks with packet buffering 1337

# Mobile IPv6

A new flow-based fast handover method for Mobile IPv6 network with route optimization 3870

#### Mobile IPv6

Handoff latency analysis of mobile IPv6 protocol variations 849

# **Mobile landmarks**

Path planning of mobile landmarks for localization in wireless sensor networks 2577

#### Mobile location management

A Simulated Annealing approach for mobile location management 714

#### Mobile multicast

A hierarchical multicast protocol in mobile IPv6 networks 144

#### Mobile networks

A platform for charging, billing, and accounting in future mobile networks 516

#### Mobile networks

FH-RSVP scheme for intra-site handover in hierarchical mobile IPv6 networks 416

# Mobile peer-to-peer network

Improving search efficiency using Bloom filters in partially connected ad hoc networks: A node-centric analysis 3000

#### Mobile phone

Design and implementation of wireless PKI technology suitable for mobile phone in mobile-commerce 893

#### Mobile robots

Path planning of mobile landmarks for localization in wireless sensor networks 2577

# Mobile robots

Sensor replacement using mobile robots 2615

Dynamic transport layer handover for heterogeneous communication environments 3232

# Mobile station state management

Modeling and analysis of mobility management state of packet-switched (PS) services in GPRS 166

# Mobile wireless networks

A QoS multicast routing protocol for clustering mobile ad hoc networks 1641

A link availability-based QoS-aware routing protocol for mobile ad hoc sensor networks 3823

#### Mobility

Fault-resilient sensing in wireless sensor networks 2375

Improving search efficiency using Bloom filters in partially connected ad hoc networks: A node-centric analysis 3000

Low-latency handoff inter-WLAN IP mobility with broadband network control 750

# Mobility

Radio-over-Fiber based architecture for seamless wireless indoor communication in the 60 GHz band 3598

#### Mobility

The handover control mechanism for multi-path transmission using Stream Control Transmission Protocol (SCTP) 3239 Mobility

Towards characterizing the effectiveness of random mobility against actuation attacks 2546

#### Mobility management

A mobility management model based on users' mobility profiles for IPv6 networks 66

#### Mobility management

DIP-MIP: Distributed individual paging extension for mobile IP in IP-based cellular networks 1178

# Mobility management

DualMAC: A soft handoff mechanism for real-time communications in secured WLANs 1785

# Mobility management

FH-RSVP scheme for intra-site handover in hierarchical mobile IPv6 networks 416

#### Mobility management

Mobility management in all-IP two-tier cellular networks 3442

#### Mobility management

Modeling and analysis of mobility management state of packet-switched (PS) services in GPRS 166

#### Mobility management

RSVP extensions for real-time services in heterogeneous wireless networks 2248

# Mobility management

TLMM: MIP-based Three Level Mobility Model 1244

#### Mobility model

DIP-MIP: Distributed individual paging extension for mobile IP in IP-based cellular networks 1178

# Mobility prediction

QoS provisioning by EFuNNs-based handoff planning in cellular MPLS networks 2676

# Model

Modeling and simulating coverage in sensor networks 1029 Modeling

#### A truncated Pareto distribution 1

# Modeling

Experimental validation of the ON-OFF packet-level model for IP traffic 975

# Modeling

Simulating mobile ad hoc networks in city scenarios 1466 Modeling

Traffic modeling in wireless mobile systems by means of ring and toroidal cell layouts: Performance comparison and validation against measurement data 1116

# Modeling and analysis

Performance analysis and comparison of interrupt-handling schemes in gigabit networks 3425

# Modular architecture

Predictive connectionist approach for VoD bandwidth management 2236

#### Moments

A truncated bivariate generalized Pareto distribution 1926 Motion overhead

Sensor replacement using mobile robots 2615

# MPEG-21

End-to-end quality of service provisioning through an integrated management system for multimedia content delivery 638

#### MPEG-21

MPEG-21 digital items to support integration of heterogeneous multimedia content 592

#### MPEG-4

MPEG-21 digital items to support integration of heterogeneous multimedia content 592

# MPLS

An objective-oriented service model for VoIP overlay networks over DiffServ/MPLS networks 3055

#### **MPLS** networks

A lightweight implementation of RSVP-TE protocol for MPLS-TE signaling 1199

#### Multi-access communication

QoS and energy efficiency in network wide broadcasting: A MAC layer perspective 3705

#### Multi-channel

An efficient cluster-based multi-channel management protocol for wireless Ad Hoc networks 1742

#### Multi-channel Control Architecture (MCA)

Performance optimization with propagation delay analysis in WDM networks 3572

#### Multi-domain networks

Distributed inter-domain lightpath provisioning in the presence of wavelength conversion 3662

#### Multi-domain networks

Hierarchical routing in multi-domain optical networks 122

#### **Multi-domains**

LSSP: A novel local segment-shared protection for multidomain optical mesh networks 1794

#### **Multi-objective**

An efficient technique for a series of virtual topology reconfigurations in WDM optical networks 1301

# Multi-objective optimization

A cellular multi-objective genetic algorithm for optimal broadcasting strategy in metropolitan MANETs 685

#### Multi-objective optimization

A TDMA scheduling scheme for many-to-one communications in wireless sensor networks 863

#### Multi-path handover

The handover control mechanism for multi-path transmission using Stream Control Transmission Protocol (SCTP) 3239

#### Multi-path transmission

The handover control mechanism for multi-path transmission using Stream Control Transmission Protocol (SCTP) 3239

# Multi-path transport

Unequal error protection for real-time video in mobile ad hoc networks via multi-path transport 3293

#### Multi-privileged group communications

Efficient group key management for multi-privileged groups 2497

# Multi-sender

A multi-sender multicast algorithm for media streaming on peer-to-peer networks 2191

# Multicast

A QoS multicast routing protocol for clustering mobile ad hoc networks 1641

# Multicast

Energy-efficient geographic multicast routing for Sensor and Actuator Networks 2519

# Multicast

Performance of multicast in WDM slotted ring networks 219

# Multicast mesh

An adaptive redundancy protocol for mesh based multicasting 1015

#### **Multicast routing**

An enhanced QoS CBT multicast routing protocol based on Genetic Algorithm in a hybrid HAP-Satellite system 3126

#### **Multicast routing**

Energy efficient multicast routing in ad hoc wireless networks 3746

#### **Multicast routing**

Landscape analysis for multicast routing 101

#### **Multicast routing**

Performance evaluation of multicast ad hoc on-demand distance vector protocol 1931

# **Multicast tree**

An adaptive redundancy protocol for mesh based multicasting 1015

#### Multicasting

An adaptive redundancy protocol for mesh based multicasting 1015

#### Multicasting

QoS-constrained core selection for group communication 1600

# **Multicasting protocols**

A scalability comparison of GST and SST MANET multicast routing algorithms 3851

# Multihoming

Adaptive arrival rate dependent traffic balancing with redundancy 1220

# Multihoming

Concurrent multipath communication for real-time traffic 3307

#### Multihoming

Dynamic transport layer handover for heterogeneous communication environments 3232

#### Multihoming

Handover management based on the number of data frame retransmissions for VoWLAN 3257

#### Multihoming

Performance implications of a bounded receive buffer in concurrent multipath transfer 818

#### Multihoming

The handover control mechanism for multi-path transmission using Stream Control Transmission Protocol (SCTP) 3239

# Multihoming route control

Multihoming route control among a group of multihomed stub networks 3335

#### Multihop networks

O(1)-Reception routing for sensor networks 2603

# **MultiHop Wireless Network**

Jointly rate and power control in contention based MultiHop Wireless Networks 2021

#### Multimedia

Concurrent multipath communication for real-time traffic 3307

#### Multimedia

Convergence of periodic broadcasting and video-ondemand 1136

#### Multimedia

Modeling end-to-end QoS management and real time agreement protocols for resource reservation for multimedia mobile radic network 1953

#### **Multimedia communication**

Improving performance of transport protocols in multipath transferring schemes 3270

#### **Multimedia** communication

Packet loss resilience using unequal forward error correction assignment for video transmission over communication networks 3676

# **Multimedia communications**

Parametric mobility support dynamic resource reservation and call admission control scheme for cellular multimedia communications 233

#### **Multimedia distribution**

Efficient multimedia distribution architecture using anycast 288

# **Multimedia Group Communications**

A mini-bandwidth guaranteed and differentiated service supporting bandwidth allocation algorithm for Multimedia Group Communication 465

#### Multimedia object

An optimal solution for caching multimedia objects in transcoding proxies 1802

#### Multimedia streaming

A multi-sender multicast algorithm for media streaming on peer-to-peer networks 2191

#### Multimedia streaming

Reliable transmission of multimedia streaming using a connection prediction scheme in cluster-based ad hoc networks 440

#### Muitimedia traffic prediction

On providing dynamic resource allocation based on multimedia traffic prediction in satellite systems 404

#### Multinomial

Bandwidth estimation for multiplexed videos using multinomial model 269

# Multiobjective optimization

Two additive-constrained path selection in the presence of inaccurate state information 2096

# Multipath

An efficient multipath structure for concurrent data transport in wireless mesh networks 3358

# Multipath

Performance analysis of adaptive multipath load balancing in WDM-LOBS networks 3460

# **Multipath communications**

Deployable multipath communication scheme with sufficient performance data distribution method 3285

# Multipath routing

Directional geographical routing for real-time video communications in wireless sensor networks 3368

# **Multipath routing**

Guaranteed on-demand discovery of node-disjoint paths in ad hoc networks 2917

# **Multipath routing**

SEEM: Secure and energy-efficient multipath routing protocol for wireless sensor networks 2401

# **Multipath TCP**

Deployable multipath communication scheme with sufficient performance data distribution method 3285

#### Multipath transferring

Improving performance of transport protocols in multipath transferring schemes 3270

# Multiple Backoff Windows DCF-MB

Adjustment mechanism for the IEEE 802.11 contention window: An efficient bandwidth sharing scheme 2686

#### Multiple failures

LSSP: A novel local segment-shared protection for multidomain optical mesh networks 1794

# Multiplexing gain

Bandwidth estimation for multiplexed videos using multinomial model 269

#### Multipoint-to-point communications

Enhancing real-time video streaming over mobile ad hoc networks using multipoint-to-point communication 1754

# Multiprocessors

A deadlock detection mechanism for true fully adaptive routing in regular wormhole networks 1826

#### Multiprotocol-label switching

Applications of genetic algorithms to optimal multilevel design of MPLS-based networks 2010

#### Multistate

Evaluation of all one-to-many reliabilities for acyclic multistate-node distributed computing system under cost and capacity constraints 3796

#### NEMO

VARON: Vehicular Ad hoc Route Optimisation for NEMO 1765

#### Network access control

Efficient security mechanisms for overlay multicast based content delivery 793

# Network access point (NAP)

Practical channel state aware and cooperative packet scheduling disciplines for coordinating colocated Bluetooth and IEEE 802.11b devices 1569

# Network architecture

A survey on clustering algorithms for wireless sensor networks 2826

# **Network calculus**

Quality of service provision in combined input and crosspoint queued switches without output queueing match 830

# **Network coverage**

Using event detection latency to evaluate the coverage of a wireless sensor network 2699

# **Network emulation**

Experiences with node virtualization for scalable network emulation 943

# **Network information**

Gathering-based routing protocol in mobile ad hoc networks 202

# **Network lifetime**

Guaranteeing the network lifetime in wireless sensor networks: A MAC layer approach 2532

#### Network lifetime

PEACH: Power-efficient and adaptive clustering hierarchy protocol for wireless sensor networks 2842

#### **Network lifetime**

SEEM: Secure and energy-efficient multipath routing protocol for wireless sensor networks 2401

#### Network management

Adaptive clustering in wireless sensor networks by mining sensor energy data 2968

#### Network measurement

On evaluating the differences of TCP and ICMP in network measurement 428

#### Network measurement

Topology-aware overlay path probing 1994

#### **Network mobility**

VARON: Vehicular Ad hoc Route Optimisation for NEMO 1765

#### **Network optimization**

Applications of genetic algorithms to optimal multilevel design of MPLS-based networks 2010

#### Network partitioning

Contact-based buffering for delay-tolerant ad hoc broadcasting 3144

#### **Network performance**

On evaluating the differences of TCP and ICMP in network measurement 428

#### **Network protection**

Performance evaluation of minimum interference routing in network scenarios with protection requirements 3161

#### **Network protocols**

On application-level load balancing in FastReplica 3218

# **Network reliability**

Evaluation of all one-to-many reliabilities for acyclic multistate-node distributed computing system under cost and capacity constraints 3796

#### **Network simulation**

Performance evaluation and simulations of routing protocols in ad hoc networks 1890

# Network state aggregation

State aggregation of large network domains 873

# **Network support**

An approach to achieve scalability through a structured peerto-peer network for massively multiplayer online role playing games 3075

# Network technology

Case studies of network designs with technology considerations 3117

#### Network throughput increase

Adjustment mechanism for the IEEE 802.11 contention window: An efficient bandwidth sharing scheme 2686

# **Network topology**

Case studies of network designs with technology considerations 3117

#### **Network topology**

Using the vulnerability information of computer systems to improve the network security 2032

#### **Networks**

Metaheuristics for optimization problems in computer communications 656

#### **Neuro-fuzzy**

A new approach to intrusion detection based on an evolutionary soft computing model using neuro-fuzzy classifiers 2201

#### NewRend

Local and global stability of TCP-newReno/RED with many flows 1091

#### Next generation network

OSA/Parlay-based middleware architecture and performance analysis for homogeneous service provision in Next Generation Networks 564

#### Node architecture

A novel node architecture for optical networks: Modeling, analysis and performance evaluation 999

# Node compromise

Resilience of sink filtering scheme in wireless sensor networks 55

#### Node-centric

Improving search efficiency using Bloom filters in partially connected ad hoc networks: A node-centric analysis 3000

#### Noise immunity

GPS-less location algorithm for wireless sensor networks 2904

# Non-linear workload modeling

Adjusted fair scheduling and non-linear workload prediction for QoS guarantees in grid computing 499

# Nonpreemptive resume priority queuing

Medium-access control protocols for WDM-based optical access networks with passive-star clusters interconnected by a backbone ring 3614

#### Nonuniform traffic

Captured-frame matching schemes for scalable inputqueued packet switches 2149

#### **NP-complete**

Analysis and algorithms design for the partition of large-scale adaptive mobile wireless networks 1899

#### NP-han

A hybrid method for solving ARWA problem on WDM network 385

#### NS-2

A low overhead dynamic route repairing mechanism for mobile ad hoc networks 1152

#### NS-2

Cost analysis and optimization for IP multicast group management 1721

# **Object Naming Service**

Architecture design and performance evaluation of RFID object tracking systems 2070

# Object tracking

Energy-aware location error handling for object tracking applications in wireless sensor networks 1443

#### Object tracking

Mobile object tracking in wireless sensor networks 1811

#### **OBP**

New bluetooth interconnection methods: Overlaid Bluetooth Piconets (OBP) and Temporary Scatternets (TS) 2258

# OBS

Performance analysis of adaptive multipath load balancing in WDM-LOBS networks 3460

#### **OBS** networks

Interleaved Traffic Splitting: A promising technique to solve False Timeout 3480

#### Obstacle

On the efficient and fast response for sensor deployment in sparse wireless sensor networks 3892

# **Obstacles**

A Delaunay Triangulation based method for wireless sensor network deployment 2744

#### OFDMA

Modeling of streaming and elastic flow integration in OFDMA-based IEEE802.16 WiMAX 3644

# OFDMA

Tiny MAP: An efficient MAP in IEEE 802.16/WiMAX broadband wireless access systems 2122

# Off-line password guessing attack

Security flaws of remote user access over insecure networks 117

#### ON-OFF

Experimental validation of the ON-OFF packet-level model for IP traffic 975

#### One-way function

Efficient group key management for multi-privileged groups 2497

#### Online simulation

Priority-enabled optical shared protection: An online efficiency evaluation study 3690

#### Ontology

An ontology description for SIP security flaws 1367

#### Open APIs

A platform for charging, billing, and accounting in future mobile networks 516

#### Operating systems

Performance analysis and comparison of interrupt-handling schemes in gigabit networks 3425

#### Optical access network

Medium-access control protocols for WDM-based optical access networks with passive-star clusters interconnected by a backbone ring 3614

# Optical burst switching

A novel node architecture for optical networks: Modeling, analysis and performance evaluation 999

#### Optical burst switching

Feedback-based offset time selection for end-to-end proportional QoS provisioning in WDM optical burst switching networks 904

#### Optical burst switching

Performance of OBS techniques under self-similar traffic based on various burst assembly techniques 315

#### **Optical Burst Switching**

Provision of differentiated performance in Optical Burst Switching networks based on burst assembly processes 3449

# **Optical Burst Switching (OBS)**

Slotted Optical Burst Switching (SOBS) networks 3471

#### Optical label-switched networks

Performance analysis of a dynamic QoS scheme in optical label-switched networks 3012

# Optical mesh networks

LSSP: A novel local segment-shared protection for multidomain optical mesh networks 1794

# Optical networking

A novel node architecture for optical networks: Modeling, analysis and performance evaluation 999

#### Optical networking

Performance of multicast in WDM slotted ring networks 219

#### Optical networks

A distributed advance reservation system for interconnected slotted optical networks: Design and simulations 1142

#### **Optical networks**

Distributed inter-domain lightpath provisioning in the presence of wavelength conversion 3662

#### Optical networks

Hierarchical routing in multi-domain optical networks 122

# Optical networks

Priority-enabled optical shared protection: An online efficiency evaluation study 3690

#### Optical networks

Recovery time guaranteed heuristic routing for improving computation complexity in survivable WDM networks 1331

#### Optical packet switching

A novel node architecture for optical networks: Modeling, analysis and performance evaluation 999

#### Optical packet switching

Traffic modelling of asynchronous bufferless optical packet switched networks 1229

#### Optical switching

Coupled-layer type waveband path design method corresponding to traffic demand fluctuation 965

# **Optical WDM networks**

A new and improved algorithm for dynamic survivable routing in optical WDM networks 1419

#### Optimal routing

Multihoming route control among a group of multihomed stub networks 3335

#### Optimal surveillance

On efficient deployment of sensors on planar grid 2721

#### Optimisation

An argument for simple embedded ACL optimisation 280

# **Optimistic DAD**

AROD: An address autoconfiguration with address reservation and optimistic duplicated address detection for mobile ad hoc networks 1913

# Optimization

A cross-layer transmission scheduling scheme for wireless sensor networks 2987

# Optimization

An efficient technique for a series of virtual topology reconfigurations in WDM optical networks 1301

# Optimization

Case studies of network designs with technology considerations 3117

# Optimization

Cost analysis and optimization for IP multicast group management 1721

# Optimization

Design of a peer-to-peer system for optimized content replication 3107

# Optimization

Efficient Routing Heuristics for Internet Traffic Engineering 1942

# Optimization

Improved balancing heuristics for optimizing shortest path routing 1513

#### Optimization

Mobile computing: Opportunities for optimization research 670

# Optimization

Modeling and simulating coverage in sensor networks 1029

#### Optimization

Time efficient heuristics for cell-to-switch assignment in quasi-static/dynamic location area planning of mobile cellular networks 326

#### Optimization problem

An optimal solution for caching multimedia objects in transcoding proxies 1802

#### **Optimum solutions**

Managing the power resources of sensor networks with performance considerations 1122

#### **OSA/Parlay APIs**

OSA/Parlay-based middleware architecture and performance analysis for homogeneous service provision in Next Generation Networks 564

#### **OSPF**

Efficient Routing Heuristics for Internet Traffic Engineering 1942

#### **OSPF**

Improved balancing heuristics for optimizing shortest path routing 1513

#### Output queueing match

Quality of service provision in combined input and crosspoint queued switches without output queueing match 830

# Output-queued packet switch

Emulating output queueing with parallel packet switches 3403

#### Overflow threshold

Mobility management in all-IP two-tier cellular networks 3442

#### Overhead

Trust-based security for wireless ad hoc and sensor networks 2413

#### Overhearing

Using overhearing technique to detect malicious packetmodifying attacks in wireless sensor networks 2342

#### Overlay multicast

A multi-sender multicast algorithm for media streaming on peer-to-peer networks 2191

# Overlay multicast

Efficient security mechanisms for overlay multicast based content delivery 793

#### Overlay network

An objective-oriented service model for VoIP overlay networks over DiffServ/MPLS networks 3055

# Overlay network

Deployable multipath communication scheme with sufficient performance data distribution method 3285

#### Overlay network

Topology-aware overlay path probing 1994

#### P2MP RSVP-TE

Extensions to P2MP RSVP-TE for VPN-specific state provisioning with fair resource sharing 3736

#### P2P

A P2P technology middleware architecture enabling usercentric services deployment on low-cost embedded networked devices 527

# p2p

Design of a peer-to-peer system for optimized content replication 3107

# P2P networks

Fair resource allocation in peer-to-peer networks (extended version) 3046

# Packet buffering

Priority forwarding for improving the TCP performance in mobile IP based networks with packet buffering 1337

# Packet classification

Parallel tree search: An algorithmic approach for multi-field packet classification 302

# Packet classification

Two-dimensional packet classification algorithm using a quad-tree 1396

#### Packet delay

Performance analysis of a dynamic QoS scheme in optical label-switched networks 3012

#### Packet forwarding

Build shape-shifting tries for fast IP lookup in O(n) time 3787

# **Packet latency**

An argument for simple embedded ACL optimisation 280

#### Packet loss

Packet loss resilience using unequal forward error correction assignment for video transmission over communication networks 3676

# **Packet loss**

Performance analysis of a dynamic QoS scheme in optical label-switched networks 3012

# Packet queuing delay

An adaptive packet scheduling algorithm for efficient downlink bandwidth allocation in UWB based wireless infrastructure networks 2087

#### Packet reordering

Reorder buffer-occupancy density and its application for measurement and evaluation of packet reordering 1980

#### Packet scheduling

A queue management algorithm for fair bandwidth allocation 2048

#### Packet switching

Parallel tree search: An algorithmic approach for multi-field packet classification 302

#### Packet switching

Quality of service provision in combined input and crosspoint queued switches without output queueing match 830

# Packet switching

Reorder buffer-occupancy density and its application for measurement and evaluation of packet reordering 1980

#### Packet-level model

Experimental validation of the ON-OFF packet-level model for IP traffic 975

# Packet-switched services

Modeling and analysis of mobility management state of packet-switched (PS) services in GPRS 166

# Packetization interval

WLAN VoIP capacity allocation using an adaptive voice packetization server 2661

# **Paging**

Adaptive location update area design for wireless cellular networks under 2D Markov walk model 2060

#### Pagino

DIP-MIP: Distributed individual paging extension for mobile IP in IP-based cellular networks 1178

#### **Paging**

Modeling and analysis of mobility management state of packet-switched (PS) services in GPRS 166

# Parallel computing

Designing cellular networks using a parallel hybrid metaheuristic on the computational grid 698

#### Parallel data transfer

Deployable multipath communication scheme with sufficient performance data distribution method 3285

# Parallel packet switch

Emulating output queueing with parallel packet switches 3403

#### Parallel processing

Parallel tree search: An algorithmic approach for multi-field packet classification 302

#### Parametric mobility

Parametric mobility support dynamic resource reservation and call admission control scheme for cellular multimedia communications 233

#### Pareto optimal

Two additive-constrained path selection in the presence of inaccurate state information 2096

#### Partial reliability

Concurrent multipath communication for real-time traffic 3307

# Particle swarm optimization

A TDMA scheduling scheme for many-to-one communications in wireless sensor networks 863

#### Particle swarm optimization

Adaptive resource reservation schemes for proportional DiffServ enabled fourth-generation mobile communications system 1613

#### **Partition**

Analysis and algorithms design for the partition of large-scale adaptive mobile wireless networks 1899

#### **Password**

Off-line password-guessing attack to Peyravian-Jeffries's remote user authentication protocol 52

#### Password authentication

Security flaws of remote user access over insecure networks 117

#### Pastry

An approach to achieve scalability through a structured peerto-peer network for massively multiplayer online role playing games 3075

# Pastry environment

A multi-sender multicast algorithm for media streaming on peer-to-peer networks 2191

# Path key establishment

Pair-wise path key establishment in wireless sensor networks 2365

#### Path planning

Path planning of mobile landmarks for localization in wireless sensor networks 2577

#### Path protection

Quality of service based resource allocation for scheduled lightpath demands 3550

# Path segment

Topology-aware overlay path probing 1994

# Path selection

On-the-fly TCP path selection algorithm in access link load balancing 351

# Path-based approach

On the problem of capacity allocation and flow assignment in self-healing ATM networks 3169

# Path-shared protection

LSSP: A novel local segment-shared protection for multidomain optical mesh networks 1794

#### **PCS** networks

A hybrid grouping genetic algorithm for the registration area planning problem 2180

#### Peer

A P2P technology middleware architecture enabling usercentric services deployment on low-cost embedded networked devices 527

#### Peer-to-peer

An approach to achieve scalability through a structured peerto-peer network for massively multiplayer online role playing games 3075

#### Peer-to-Peer

An efficient update propagation algorithm for P2P systems 1106

#### Peer-to-peer networks

A multi-sender multicast algorithm for media streaming on peer-to-peer networks 2191

#### Peer-to-peer systems

OSDA: Open service discovery architecture for efficient cross-domain service provisioning 546

#### Peer-to-peer trust model

Building a virtual hierarchy to simplify certification path discovery in mobile ad-hoc networks 1498

#### PER, Packet error rate

Efficient ARQ protocols for exploiting cooperative relaying in wireless sensor networks 2765

#### Performance analysis

Performance analysis of adaptive multipath load balancing in WDM-LOBS networks 3460

# Performance analysis

The performance analysis of linux networking – Packet receiving 1044

#### Performance analysis and evaluation

A novel node architecture for optical networks: Modeling, analysis and performance evaluation 999

# Performance analysis and evaluation

Performance analysis and evaluation for multi-traffic networks with priority control 1562

# Performance evaluation

A user-focused evaluation of web prefetching algorithms 2213

#### Performance evaluation

DREAM: A system for detection and reaction against MAC layer misbehavior in ad hoc networks 1841

#### Performance evaluation

On TCP performance over asymmetric satellite links with real-time constraints 1451

# Performance evaluation

Performance analysis and comparison of interrupt-handling schemes in gigabit networks 3425

#### Performance evaluation

Performance analysis of a dynamic QoS scheme in optical label-switched networks 3012

# Performance evaluation

Performance analysis of probabilistic packet marking in IPv6 3193

# Performance evaluation

Performance evaluation and comparison of different ad hoc routing protocols 2478

# Performance evaluation

Performance evaluation and simulations of routing protocols in ad hoc networks 1890

# Performance evaluation

Performance evaluation of multicast ad hoc on-demand distance vector protocol 1931

#### Performance evaluation

Stochastic modelling and analysis of 802.11 DCF with heterogeneous non-saturated nodes 3652

#### Performance evaluation

The packet-based networks performance requirements for real-time facsimile transmission 1289

#### Performance measurement

On evaluating the differences of TCP and ICMP in network measurement 428

# Performance study

Evaluation of network traffic workload scaling techniques 3096

#### Periodic broadcasting

Convergence of periodic broadcasting and video-ondemand 1136

#### Personalization of service

Userware: A framework for next generation personalized services 619

#### Pervasive computing

Using event detection latency to evaluate the coverage of a wireless sensor network 2699

#### Phase distribution

Space priority queue with fuzzy set threshold 2301

#### **Piconet**

New bluetooth interconnection methods: Overlaid Bluetooth Piconets (OBP) and Temporary Scatternets (TS) 2258

#### PKI

Building a virtual hierarchy to simplify certification path discovery in mobile ad-hoc networks 1498

# **Placement**

Modeling and simulating coverage in sensor networks 1029

#### Placement policy

On the efficient and fast response for sensor deployment in sparse wireless sensor networks 3892

#### Playback

Reorder buffer-occupancy density and its application for measurement and evaluation of packet reordering 1980

# Poisson traffic

Performance of OBS techniques under self-similar traffic based on various burst assembly techniques 315

# **Polling**

Performance analysis and comparison of interrupt-handling schemes in gigabit networks 3425

# Power consumption

WLAN VoIP capacity allocation using an adaptive voice packetization server 2661

#### Power control

Jointly rate and power control in contention based MultiHop Wireless Networks 2021

# **Power control**

Power control and fairness MAC mechanisms for 802.11 WLANs 1527

# Power control

Power control based topology construction for the distributed wireless sensor networks 2774

# Power minimization

An efficient routing scheme with optimal power control in wireless multi-hop sensor networks 2735

#### Power saving

An efficient cluster-based multi-channel management protocol for wireless Ad Hoc networks 1742

#### Power saving

Power control and fairness MAC mechanisms for 802.11 WLANs 1527

#### Power-oriented

Novel radio resource allocation strategy for multimedia content delivery over satellite multicast/broadcast systems 1870

#### Pre-allocated restoration

Spare capacity allocation and optimisation in a distributed GMPLS-based IP/WDM mesh network 3085

#### **Predictive coding**

Unequal error protection for real-time video in mobile ad hoc networks via multi-path transport 3293

#### Preemptive resume priority queuing

Medium-access control protocols for WDM-based optical access networks with passive-star clusters interconnected by a backbone ring 3614

#### Preferred link approach

Distributed network control for establishing reliability-constrained least-cost lightpaths in WDM Mesh networks 1546

#### **Priority**

Two-dimensional packet classification algorithm using a quad-tree 1396

#### Prisoner's Dilemma

Best neighbor strategy to enforce cooperation among selfish nodes in wireless ad hoc network 3721

#### Proactive update

Providing distributed certificate authority service in cluster-based mobile ad hoc networks 2442

# Probabilistic packet marking

Performance analysis of probabilistic packet marking in IPv6 3193

# **Process scheduling**

The performance analysis of linux networking – Packet receiving 1044

# **PROFIBUS**

Engineering PROFIBUS networks with heterogeneous transmission media 17

# **Profile interactions**

Userware: A framework for next generation personalized services 619

# Profile-based location

A mobility management model based on users' mobility profiles for IPv6 networks 66

# Promotion

Fair early drop marker for improving TCP fairness in multiple domain DiffServ networks 1205

# Propagation delay

A new high rate adaptive wireless data dissemination scheme 957

#### Propagation delay latency

Performance optimization with propagation delay analysis in WDM networks 3572

#### Proportional differentiated services

Adaptive resource reservation schemes for proportional DiffServ enabled fourth-generation mobile communications system 1613

#### Proportional fairness

Channel-aware VoIP packet scheduling in cdma2000 1x EV-DO networks 2284

#### Proportional model

Hop-count based probabilistic packet dropping: Congestion mitigation with loss rate differentiation 3859

#### **Proportional QoS**

Feedback-based offset time selection for end-to-end proportional QoS provisioning in WDM optical burst switching networks 904

#### Protection

A new and improved algorithm for dynamic survivable routing in optical WDM networks 1419

#### Protection

Priority-enabled optical shared protection: An online efficiency evaluation study 3690

#### Protection

Recovery time guaranteed heuristic routing for improving computation complexity in survivable WDM networks 1331

#### Protocol

A hierarchical multicast protocol in mobile IPv6 networks 144

#### Protocol stack

The performance analysis of linux networking – Packet receiving 1044

#### **Protocols**

QoS and energy efficiency in network wide broadcasting: A MAC layer perspective 3705

#### **Protocols**

Seamless transport service selection by deploying a middleware 630

# Proxy

Efficient multimedia distribution architecture using anycast 288

# **Proxy caching**

An optimal solution for caching multimedia objects in transcoding proxies 1802

# Push-in arbitrary-out queues

Emulating output queueing with parallel packet switches 3403

#### QoS

A link availability-based QoS-aware routing protocol for mobile ad hoc sensor networks 3823

#### QoS

A new scalable service discipline for real-time traffic: The framed-deadline scheduler 1258

#### QoS

A new scheduling scheme for high-speed packet networks: Earliest-virtual-deadline-first 2291

#### QoS

An enhanced QoS CBT multicast routing protocol based on Genetic Algorithm in a hybrid HAP-Satellite system 3126

### QoS

An integrated end-to-end QoS anycast routing on DiffServ networks 1406

# QoS

An RSVP based seamless resource reservation scheme for wireless mobile networks 81

#### QoS

Distributed network control for establishing reliabilityconstrained least-cost lightpaths in WDM Mesh networks 1546

#### QoS

Dynamic radio resource allocation for 3G and beyond mobile wireless networks 41

#### Qos

Extensions to P2MP RSVP-TE for VPN-specific state provisioning with fair resource sharing 3736

#### QoS

On TCP performance over asymmetric satellite links with real-time constraints 1451

# QoS

Performance evaluation and simulations of routing protocols in ad hoc networks 1890

#### QoS

QoS-aware Internet access schemes for wireless mobile ad hoc networks 369

#### QoS architectures

Adaptive rate allocation and resource planning for service level agreement maintenance in satellite communications 3179

# QoS group communications

A fast and efficient multicast algorithm for QoS group communications in heterogeneous network 2225

#### QoS mapping

Adaptive rate allocation and resource planning for service level agreement maintenance in satellite communications 3179

#### QoS mapping

An objective-oriented service model for VoIP overlay networks over DiffServ/MPLS networks 3055

#### QoS provisioning model

A conservative approach to adaptive call admission control for QoS provisioning in multimedia wireless networks 249

# **QoS** requirements

Adjusted fair scheduling and non-linear workload prediction for QoS guarantees in grid computing 499

#### **QoS** routing

A QoS multicast routing protocol for clustering mobile ad hoc networks 1641

# **QoS** routing

Performance evaluation of minimum interference routing in network scenarios with protection requirements 3161

#### Qos routing

QoS-constrained core selection for group communication 1600

#### QoS routing

Two additive-constrained path selection in the presence of inaccurate state information 2096

#### QoS-aware

DiGA: Population diversity handling genetic algorithm for QoS-aware web services selection 1082

# QoS-controlled paths

Flow management for QoS-controlled 'data connectivity' provisioning 1165

#### **Quality control**

An efficient routing scheme with optimal power control in wireless multi-hop sensor networks 2735

# **Quality inference**

Topology-aware overlay path probing 1994

#### Quality of service

A genetic approach for adding QoS to distributed virtual environments 731

# **Quality of Service**

A mini-bandwidth guaranteed and differentiated service supporting bandwidth allocation algorithm for Multimedia Group Communication 465

# Quality of service

FH-RSVP scheme for intra-site handover in hierarchical mobile IPv6 networks 416

#### Quality of service

Parametric mobility support dynamic resource reservation and call admission control scheme for cellular multimedia communications 233

#### **Quality of Service**

Performance analysis of a novel traffic scheduling algorithm in slotted optical networks 3559

#### **Quality of Service**

QoS provisioning by EFuNNs-based handoff planning in cellular MPLS networks 2676

#### Quality of service

Quality of service provision in combined input and crosspoint queued switches without output queueing match 830

# **Quality of Service**

Refined assured forwarding framework for differentiated services architecture 3841

# **Quality of Service**

RSVP extensions for real-time services in heterogeneous wireless networks 2248

#### **Quality of Service**

State aggregation of large network domains 873

#### Quality of service (QoS)

A novel node architecture for optical networks: Modeling, analysis and performance evaluation 999

# Quality of service (QoS)

FARE: An efficient integrated MAC protocol for differentiated services in WDM metro rings 1315

# Quality of service (QoS)

Landscape analysis for multicast routing 101

#### Quality of service (QoS)

Modified EDCF to improve the performance of IEEE 802.11e WLAN 841

#### Quality of Service (QoS)

QoS and energy efficiency in network wide broadcasting: A MAC layer perspective 3705

#### Quality of Service (QoS)

Using artificial intelligence in routing schemes for wireless networks 2802

# Quality of service provisioning

Priority-enabled optical shared protection: An online efficiency evaluation study 3690

#### **Quality of services**

Two-dimensional packet classification algorithm using a quad-tree 1396

#### Quality-of-service

Adaptive resource reservation schemes for proportional DiffServ enabled fourth-generation mobile communications system 1613

#### Quality-of-service

Fair early drop marker for improving TCP fairness in multiple domain DiffServ networks 1205

#### Quality-of-service differentiation

Hop-count based probabilistic packet dropping: Congestion mitigation with loss rate differentiation 3859

#### Query based

Improving search efficiency using Bloom filters in partially connected ad hoc networks: A node-centric analysis 3000

#### Query optimization

Service-oriented sensor-actuator networks: Promises, challenges, and the road ahead 2627

#### Queue

Handoff multiple queue model in microcellular networks 396

#### Queue normalization

Reduction of queue oscillation in the next generation Internet routers 3881

#### Queue oscillation

Reduction of queue oscillation in the next generation Internet routers 3881

#### Queue-based

RaQ: A robust active queue management scheme based on rate and queue length 1731

#### Queueing

Dynamic radio resource allocation for 3G and beyond mobile wireless networks 41

#### Queueing disciplines

Practical channel state aware and cooperative packet scheduling disciplines for coordinating colocated Bluetooth and IEEE 802.11b devices 1569

#### Queueing theory

Improving search efficiency using Bloom filters in partially connected ad hoc networks: A node-centric analysis 3000

# Radio mobile network

Modeling end-to-end QoS management and real time agreement protocols for resource reservation for multimedia mobile radio network 1953

# Radio resource allocation

Novel radio resource allocation strategy for multimedia content delivery over satellite multicast/broadcast systems 1870

#### Radio resource management

Radio resource management for a mobile network with TD-

# Radio-over-Fiber (RoF)

Radio-over-Fiber based architecture for seamless wireless indoor communication in the 60 GHz band 3598

#### Railroad

A virtual infrastructure for large-scale wireless sensor networks 2853

# Random early detection

Active queue management algorithm considering queue and load states 886

# Random early detection

Reduction of queue oscillation in the next generation Internet routers 3881

# Random packet losses

Exploring TCP Parallelisation for performance improvement in heterogeneous networks 3321

# Range-free

Distributed direction-based localization in wireless sensor networks 1424

#### Rate control

Fair resource allocation in peer-to-peer networks (extended version) 3046

#### Rate control

Jointly rate and power control in contention based MultiHop Wireless Networks 2021

#### Rate-based

RaQ: A robust active queue management scheme based on rate and queue length 1731

#### Re-deploy

On the efficient and fast response for sensor deployment in sparse wireless sensor networks 3892

#### Readable erasure

Performance of FH/MFSK systems with readable erasures 1538

#### Real-time

An energy-efficient real-time routing protocol for sensor networks 2274

#### Real-time communication

DualMAC: A soft handoff mechanism for real-time communications in secured WLANs 1785

#### Real-time communications

Engineering PROFIBUS networks with heterogeneous transmission media 17

#### Real-time services

RSVP extensions for real-time services in heterogeneous wireless networks 2248

#### Real-time systems

QoS and energy efficiency in network wide broadcasting: A MAC layer perspective 3705

#### Real-time traffic

A new scalable service discipline for real-time traffic: The framed-deadline scheduler 1258

# Real-time traffic

Concurrent multipath communication for real-time traffic 3307

# Real-time video streaming

Enhancing real-time video streaming over mobile ad hoc networks using multipoint-to-point communication 1754

# Receiver collisions

Performance optimization with propagation delay analysis in WDM networks 3572

# Reconfiguration

An efficient technique for a series of virtual topology reconfigurations in WDM optical networks 1301

# Reconfiguration management

Flow management for QoS-controlled 'data connectivity' provisioning 1165

#### Recovery time

Recovery time guaranteed heuristic routing for improving computation complexity in survivable WDM networks 1331

# Recursive decomposition

Two-dimensional packet classification algorithm using a quad-tree 1396

#### RED

Dynamics analysis of TCP Veno with RED 3778

#### Redirection policy

Load sharing in Call Server clusters 3027

# Redundancy

Adaptive arrival rate dependent traffic balancing with redundancy 1220

#### Refresh reduction

A lightweight implementation of RSVP-TE protocol for MPLS-TE signaling 1199

# Registration area planning

A hybrid grouping genetic algorithm for the registration area planning problem 2180

#### Reinforcement learning

Neural-based downlink scheduling algorithm for broadband wireless networks 207

#### Rekeving

Efficient group key management for multi-privileged groups 2497

#### Relation matrix coding scheme

DiGA: Population diversity handling genetic algorithm for QoS-aware web services selection 1082

# Relay model

Performance evaluation of scheduling in IEEE 802.16 based wireless mesh networks 782

#### Relaying

Efficient ARQ protocols for exploiting cooperative relaying in wireless sensor networks 2765

#### Reliability

Directional geographical routing for real-time video communications in wireless sensor networks 3368

#### Reliability

Distributed network control for establishing reliabilityconstrained least-cost lightpaths in WDM Mesh networks 1546

# Renewal theory

Improving search efficiency using Bloom filters in partially connected ad hoc networks: A node-centric analysis 3000

#### Reordering

Improving performance of transport protocols in multipath transferring schemes 3270

#### Repair proxy

Proxy location for minimizing delivery delay in HRM networks 2162

#### Reputation

Trust-based security for wireless ad hoc and sensor networks 2413

# Rerouting

A new and improved algorithm for dynamic survivable routing in optical WDM networks 1419

#### Rerouting and reassignment

Routing wavelength and time-slot reassignment algorithms for TDM based optical WDM networks 3491

# Residual

An integrated end-to-end QoS anycast routing on DiffServ networks 1406

# Resiliency

Resilience of sink filtering scheme in wireless sensor networks 55

# Resource outages

Flow management for QoS-controlled 'data connectivity' provisioning 1165

# Resource pricing

Fair resource allocation in peer-to-peer networks (extended version) 3046

# Resource reservation

An RSVP based seamless resource reservation scheme for wireless mobile networks 81

# Resource reservation

Parametric mobility support dynamic resource reservation and call admission control scheme for cellular multimedia communications 233

#### Resource reservations

Radio resource management for a mobile network with TD-CDMA 132

#### Reuse partitioning

Modeling of streaming and elastic flow integration in OFDMA-based IEEE802.16 WiMAX 3644

#### RFID object tracking

Architecture design and performance evaluation of RFID object tracking systems 2070

#### Risk evaluation

Using the vulnerability information of computer systems to improve the network security 2032

#### RM-ODP

Architectural framework for wireless mobile ad hoc networks (AF WMANETs) 178

#### Route flapping

Modified flap damping mechanism to improve inter-domain routing convergence 1588

# Route optimisation

VARON: Vehicular Ad hoc Route Optimisation for NEMO 1765

# Route optimization

A new flow-based fast handover method for Mobile IPv6 network with route optimization 3870

#### Route-coupling

An efficient multipath structure for concurrent data transport in wireless mesh networks 3358

#### Routing

A biologically-inspired clustering protocol for wireless sensor networks 2786

# Routing

A hierarchical multicast protocol in mobile IPv6 networks 144

# Routing

A link availability-based QoS-aware routing protocol for mobile ad hoc sensor networks 3823

#### Routing

An adaptive redundancy protocol for mesh based multicasting 1015

# Routing

An efficient routing scheme with optimal power control in wireless multi-hop sensor networks 2735

# Routing

DREAM: A system for detection and reaction against MAC layer misbehavior in ad hoc networks 1841

#### Routing

Efficient Routing Heuristics for Internet Traffic Engineering 1942

#### Routing

Fisheye zone routing protocol: A multi-level zone routing protocol for mobile ad hoc networks 261

#### Routing

Mobile object tracking in wireless sensor networks 1811

#### Routing

Using artificial intelligence in routing schemes for wireless networks 2802

#### **Routing Algorithm**

Adaptive backup routing for ad-hoc networks 453

# Routing algorithms

Energetic sustainability of routing algorithms for energyharvesting wireless sensor networks 2976

#### Routing and wavelength assignment

A hybrid method for solving ARWA problem on WDM network 385

#### Routing convergence

Modified flap damping mechanism to improve inter-domain routing convergence 1588

# Routing protocol

An energy-efficient real-time routing protocol for sensor networks 2274

#### **Routing protocol**

Gathering-based routing protocol in mobile ad hoc networks 202

# **Routing protocols**

O(1)-Reception routing for sensor networks 2603

#### Routing protocols

A low overhead dynamic route repairing mechanism for mobile ad hoc networks 1152

#### **Routing protocols**

Performance evaluation and comparison of different ad hoc routing protocols 2478

#### **Routing protocols**

Performance evaluation and simulations of routing protocols in ad hoc networks 1890

#### **Routing protocols**

Performance evaluation of multicast ad hoc on-demand distance vector protocol 1931

#### RSVF

FH-RSVP scheme for intra-site handover in hierarchical mobile IPv6 networks 416

#### RSVP

Performance evaluation of RSVP extensions for a guaranteed delivery scenario 2113

#### RSVP

RSVP extensions for real-time services in heterogeneous wireless networks 2248

#### **RSVP-TE**

Extensions to P2MP RSVP-TE for VPN-specific state provisioning with fair resource sharing 3736

#### **RSVP-TE** protocol

A lightweight implementation of RSVP-TE protocol for MPLS-TE signaling 1199

#### RTT

A fair bandwidth distribution mechanism in a Diffserv network 358

#### RTT

On-the-fly TCP path selection algorithm in access link load balancing 351

# RWA

A novel dynamic RWA algorithm with intelligent granularity regulation in multi-granular all-optical networks 3525

# RWA

Quality of service based resource allocation for scheduled lightpath demands 3550

#### DWA

Traffic grooming, routing, and wavelength assignment in WDM transport networks with sparse grooming resources 3508

#### SANET

Energy-efficient geographic multicast routing for Sensor and Actuator Networks 2519

#### Satellite networks

On providing dynamic resource allocation based on multimedia traffic prediction in satellite systems 404

# Satellite networks

On TCP performance over asymmetric satellite links with real-time constraints 1451

# Satellite Service Access Point

Adaptive rate allocation and resource planning for service level agreement maintenance in satellite communications 3179

#### Saturation throughput

Performance evaluation of a new backoff method for IEEE 802.11 3698

#### Scalability

A survey on clustering algorithms for wireless sensor networks 2826

#### Scalability

An efficient clustering scheme for large and dense mobile ad hoc networks (MANETs) 5

#### Scalability

Experiences with node virtualization for scalable network emulation 943

#### Scalability

Failover, load sharing and server architecture in SIP telephony 927

#### Scalability

Toward secure and scalable time synchronization in ad hoc networks 2453

#### Scalable

A new scalable service discipline for real-time traffic: The framed-deadline scheduler 1258

# Scalable streaming media

Demand-scalable geographic multicasting in wireless sensor networks 2931

#### Scatternet

New bluetooth interconnection methods: Overlaid Bluetooth Piconets (OBP) and Temporary Scatternets (TS) 2258

# Scheduled traffic model

Quality of service based resource allocation for scheduled lightpath demands 3550

# Scheduler

Analytical and experimental evaluation of TCP with an Additive Increase Smooth Decrease (AISD) strategy 479

# Scheduling

A new scheduling scheme for high-speed packet networks: Earliest-virtual-deadline-first 2291

#### Scheduling

Channel-aware VoIP packet scheduling in cdma2000 1x EV-DO networks 2284

# Scheduling

Feedback-based offset time selection for end-to-end proportional QoS provisioning in WDM optical burst switching networks 904

# Scheduling

Practical channel state aware and cooperative packet scheduling disciplines for coordinating colocated Bluetooth and IEEE 802.11b devices 1569

# Scheduling

Refined assured forwarding framework for differentiated services architecture 3841

#### Scheduling problem

Managing the power resources of sensor networks with performance considerations 1122

#### SCTP

An efficient multipath structure for concurrent data transport in wireless mesh networks 3358

# SCTP

Concurrent multipath communication for real-time traffic 3307

#### SCTE

Performance implications of a bounded receive buffer in concurrent multipath transfer 818

#### SDMB

Novel radio resource allocation strategy for multimedia content delivery over satellite multicast/broadcast systems 1870

# Search algorithm

Cache invalidation strategies for internet-based mobile ad hoc networks 1854

# Secure routing

A secure alternate path routing in sensor networks 153

#### Secure routing

Using overhearing technique to detect malicious packet-modifying attacks in wireless sensor networks 2342

#### Security

A survey of key management schemes in wireless sensor networks 2314

# Security

Architectural framework for wireless mobile ad hoc networks (AF WMANETs) 178

# Security

DREAM: A system for detection and reaction against MAC layer misbehavior in ad hoc networks 1841

# Security

Enhancing mobility management protocols to minimise AAA impact on handoff performance 608

# Security

Improving authentication of remote card transactions with mobile personal trusted devices 1697

# Security

Key management for long-lived sensor networks in hostile environments 1964

#### Security

Pair-wise path key establishment in wireless sensor networks 2365

# Security

Performance analysis of probabilistic packet marking in IPv6 3193

#### Security

Performance evaluation and comparison of different ad hoc routing protocols 2478

#### Securit

Resilience of sink filtering scheme in wireless sensor networks 55

#### Security

SEEM: Secure and energy-efficient multipath routing protocol for wireless sensor networks 2401

#### Security

Toward secure and scalable time synchronization in ad hoc networks 2453

#### Security

Towards characterizing the effectiveness of random mobility against actuation attacks 2546

#### Security

Using the vulnerability information of computer systems to improve the network security 2032

#### Segment-backup path

Recovery time guaranteed heuristic routing for improving computation complexity in survivable WDM networks 1331

#### Segment-shared protection

LSSP: A novel local segment-shared protection for multidomain optical mesh networks 1794

# Selective preferential forwarding

A hybrid meshed multipath forwarding scheme in wireless ad hoc networks 3346

#### Selective random forwarding

A hybrid meshed multipath forwarding scheme in wireless ad hoc networks 3346

#### Self-configuration

HUSEC: A heuristic self configuration model for wireless sensor networks 1624

#### Self-healing

On the problem of capacity allocation and flow assignment in self-healing ATM networks 3169

# Self-organizing map (SOM) Ubiquitous computing

Using artificial intelligence in routing schemes for wireless networks 2802

#### Self-similar traffic

Performance of OBS techniques under self-similar traffic based on various burst assembly techniques 315

# Self-similar traffic

Predictive connectionist approach for VoD bandwidth management 2236

#### Self-similarity

Evaluation of network traffic workload scaling techniques 3096

#### Selfish routing

Multihoming route control among a group of multihomed stub networks 3335

# Selfishness

Best neighbor strategy to enforce cooperation among selfish nodes in wireless ad hoc network 3721

# Semi-elastic flows

Performance evaluation of RSVP extensions for a guaranteed delivery scenario 2113

# Sender-initiated resource reservation

Performance evaluation of RSVP extensions for a guaranteed delivery scenario 2113

#### Sensing

Towards characterizing the effectiveness of random mobility against actuation attacks 2546

# Sensor

A link availability-based QoS-aware routing protocol for mobile ad hoc sensor networks 3823

# Sensor coverage

A Delaunay Triangulation based method for wireless sensor network deployment 2744

# Sensor deployment

A Delaunay Triangulation based method for wireless sensor network deployment 2744

# Sensor deployment

On efficient deployment of sensors on planar grid 2721

#### Sensor network

Adaptive security design with malicious node detection in cluster-based sensor networks 2385

#### Sensor network

An energy-efficient real-time routing protocol for sensor networks 2274

#### Sensor network

Modeling and simulating coverage in sensor networks 1029

#### Sensor network security

A secure alternate path routing in sensor networks 153

#### Sensor networks

O(1)-Reception routing for sensor networks 2603

#### Sensor networks

A hybrid meshed multipath forwarding scheme in wireless ad hoc networks 3346

#### Sensor networks

Key management for long-lived sensor networks in hostile environments 1964

#### Sensor networks

Managing the power resources of sensor networks with performance considerations 1122

#### Sensor networks

On-demand Geographic Forwarding for data delivery in wireless sensor networks 2954

#### Sensor networks

Quorum and connected dominating sets based location service in wireless ad hoc, sensor and actuator networks 3627

# Sensor networks

Sensor replacement using mobile robots 2615

#### Sensor replacement

Sensor replacement using mobile robots 2615

#### Sensor-actuator networks

Service-oriented sensor-actuator networks: Promises, challenges, and the road ahead 2627

#### Service approximation curve

State aggregation of large network domains 873

#### Service discipline

A new scalable service discipline for real-time traffic: The framed-deadline scheduler 1258

# Service discovery

OSDA: Open service discovery architecture for efficient cross-domain service provisioning 546

#### Service frame

Captured-frame matching schemes for scalable inputqueued packet switches 2149

#### Service model

An objective-oriented service model for VoIP overlay networks over DiffServ/MPLS networks 3055

#### Service-driven Routing

Service-oriented sensor-actuator networks: Promises, challenges, and the road ahead 2627

#### Service-oriented architectures

Service-oriented sensor-actuator networks: Promises, challenges, and the road ahead 2627

#### Session initiation protocol

An ontology description for SIP security flaws 1367

# Set cover

Topology-aware overlay path probing 1994

# Shape-Shifting Trie

Build shape-shifting tries for fast IP lookup in O(n) time 3787

# **Short-range communications**

An adaptive packet scheduling algorithm for efficient downlink bandwidth allocation in UWB based wireless infrastructure networks 2087

#### Signaling

Study of signaling effects on Dynamic Traffic Grooming in IP/ MPLS over WDM network 3586

#### Signaling protocol messages

Performance evaluation of RSVP extensions for a guaranteed delivery scenario 2113

#### Signaling structure

Flow management for QoS-controlled 'data connectivity' provisioning 1165

# Simulated annealing

A hybrid method for solving ARWA problem on WDM network 385

# **Simulated Annealing**

A Simulated Annealing approach for mobile location management 714

# Simulated annealing

DiGA: Population diversity handling genetic algorithm for QoS-aware web services selection 1082

#### Simulated annealing

Landscape analysis for multicast routing 101

#### **Simulation**

Modeling and simulating coverage in sensor networks 1029

#### Simulation

Performance analysis and comparison of interrupt-handling schemes in gigabit networks 3425

# Simulation

Performance evaluation and comparison of different ad hoc routing protocols 2478

#### Simulation

Simulating mobile ad hoc networks in city scenarios 1466

#### **Simulations**

A biologically-inspired clustering protocol for wireless sensor networks 2786

# Simultaneous bindings and ns-2

Handoff latency analysis of mobile IPv6 protocol variations 849

#### Single-link failure

A new and improved algorithm for dynamic survivable routing in optical WDM networks 1419

#### Sinkhole attack

An efficient intruder detection algorithm against sinkhole attacks in wireless sensor networks 2353

# SIP

Failover, load sharing and server architecture in SIP telephony 927

# SLA

Modeling end-to-end QoS management and real time agreement protocols for resource reservation for multimedia mobile radio network 1953

#### Slotted rings

Performance of multicast in WDM slotted ring networks 219

#### Slotted-PolyHarmonic-Staircase

An Interleaving Slotted-PolyHarmonic-Staircase Broadcasting Protocol for Near Video-on-Demand Services 807

#### **Smart spaces**

Agent based middleware infrastructure for autonomous context-aware ubiquitous computing services 577

#### SOAP

Webmages: An agent platform based on web services 538

#### Soft computing

A new approach to intrusion detection based on an evolutionary soft computing model using neuro-fuzzy classifiers 2201

#### Software performance evaluation

Experiences with node virtualization for scalable network emulation 943

#### SONET add-drop multiplexer

Genetic evolutionary algorithm for static traffic grooming to SONET over WDM optical networks 3392

#### Source-specific tree

A scalability comparison of GST and SST MANET multicast routing algorithms 3851

#### Space priority queue

Space priority queue with fuzzy set threshold 2301

#### Spare capacity allocation

On the problem of capacity allocation and flow assignment in self-healing ATM networks 3169

#### Spare capacity allocation

Spare capacity allocation and optimisation in a distributed GMPLS-based IP/WDM mesh network 3085

# Spare capacity optimisation

Spare capacity allocation and optimisation in a distributed GMPLS-based IP/WDM mesh network 3085

# Spatial reuse

Power control and fairness MAC mechanisms for 802.11 WLANs 1527

# Spatiotemporal guarantee

Mobile object tracking in wireless sensor networks 1811

# Speech communication

QoS and energy efficiency in network wide broadcasting: A MAC layer perspective 3705

# SRM

An integrated end-to-end QoS anycast routing on DiffServ networks 1406

# SSL overhead

Evaluation of the effect of SSL overhead in the performance of e-business servers operating in B2B scenarios 3063

#### Stability

An efficient clustering scheme for large and dense mobile ad hoc networks (MANETs) 5

#### Stability

Stability analysis of a novel exponential-RED model with heterogeneous delays 1058

# Stateless information

A queue management algorithm for fair bandwidth allocation 2048

# Static traffic grooming

Genetic evolutionary algorithm for static traffic grooming to SONET over WDM optical networks 3392

### Steiner trees

Landscape analysis for multicast routing 101

# Stochastic analysis

Stochastic modelling and analysis of 802.11 DCF with heterogeneous non-saturated nodes 3652

# Strategic game theory

Best neighbor strategy to enforce cooperation among selfish nodes in wireless ad hoc network 3721

# Stream Control Transmission Protocol (SCTP)

The handover control mechanism for multi-path transmission using Stream Control Transmission Protocol (SCTP) 3239

# Support vector machines

Adaptive resource reservation schemes for proportional DiffServ enabled fourth-generation mobile communications system 1613

#### Survivability

A new and improved algorithm for dynamic survivable routing in optical WDM networks 1419

# Survivability

Key management for long-lived sensor networks in hostile environments 1964

#### Survivability

LSSP: A novel local segment-shared protection for multidomain optical mesh networks 1794

#### Survivability

Spare capacity allocation and optimisation in a distributed GMPLS-based IP/WDM mesh network 3085

# Swarming

Design of a peer-to-peer system for optimized content replication 3107

#### T.38

The packet-based networks performance requirements for real-time facsimile transmission 1289

#### Target rate

A fair bandwidth distribution mechanism in a Diffserv network 358

#### TCP

Instability effects of two-way traffic in a TCP/AQM system 2172

#### TCP

Local and global stability of TCP-newReno/RED with many flows 1091

#### TCP

On evaluating the differences of TCP and ICMP in network measurement 428

#### TCD

On TCP performance over asymmetric satellite links with real-time constraints 1451

#### TCP

Priority forwarding for improving the TCP performance in mobile IP based networks with packet buffering 1337

#### TCP

RaQ: A robust active queue management scheme based on rate and queue length 1731

#### TCP

S-shaped TCP: A transport protocol for improving the performance of TCP in fast long-distance networks 33

#### TCP modeling

Analytical and experimental evaluation of TCP with an Additive Increase Smooth Decrease (AISD) strategy 479

# **TCP Parallelisation**

Exploring TCP Parallelisation for performance improvement in heterogeneous networks 3321

#### **TCP Reno**

Dynamics analysis of TCP Veno with RED 3778

#### TCP Reno

Fairness comparison of FAST TCP and TCP Reno 1375

#### TCP Sack

Interleaved Traffic Splitting: A promising technique to solve False Timeout 3480

#### TCP three-way handshaking

On-the-fly TCP path selection algorithm in access link load balancing 351

#### TCP Veno

Dynamics analysis of TCP Veno with RED 3778

#### **TCP-friendliness**

TCP-friendly congestion control to guarantee smoothness by Slack Term 341

#### TCP/IP

The performance analysis of linux networking – Packet receiving 1044

# TCP/IP protocols

Anomaly detection in TCP/IP networks using immune systems paradigm 740

#### TD-CDMA

Radio resource management for a mobile network with TD-CDMA 132

#### TDM-WDM network

Routing wavelength and time-slot reassignment algorithms for TDM based optical WDM networks 3491

#### TDMA

Dynamic frame length channel assignment in wireless multihop ad hoc networks 3832

#### **TDMA** scheduling

A TDMA scheduling scheme for many-to-one communications in wireless sensor networks 863

#### **TEAR**

TCP-friendly congestion control to guarantee smoothness by Slack Term 341

#### **Telecommunications**

Metaheuristics for optimization problems in computer communications 656

#### Teletraffic modelling

Traffic modelling of asynchronous bufferless optical packet switched networks 1229

#### **TFRC**

Dynamics analysis of TCP Veno with RED 3778

#### TFRO

TCP-friendly congestion control to guarantee smoothness by Slack Term 341

# **Three Level Mobility Model**

TLMM: MIP-based Three Level Mobility Model 1244

#### Threshold

Performance analysis of an adaptive handoff algorithm based on distance information 1278

#### Threshold secret sharing

Providing distributed certificate authority service in clusterbased mobile ad hoc networks 2442

# **Throughput**

A hybrid meshed multipath forwarding scheme in wireless ad hoc networks 3346

#### Throughput enhancement

An efficient multipath structure for concurrent data transport in wireless mesh networks 3358

#### Time complexity

Recovery time guaranteed heuristic routing for improving computation complexity in survivable WDM networks 1331

# Time of first lightpath request rejection

Routing wavelength and time-slot reassignment algorithms for TDM based optical WDM networks 3491

#### Time slotted

Slotted Optical Burst Switching (SOBS) networks 3471
Time synchronization

Toward secure and scalable time synchronization in ad hoc networks 2453

#### TINA

Architectural framework for wireless mobile ad hoc networks (AF WMANETs) 178

#### **TinyOS**

Service-oriented sensor-actuator networks: Promises, challenges, and the road ahead 2627

#### Topology

A virtual infrastructure for large-scale wireless sensor networks 2853

# **Topology abstraction**

Distributed inter-domain lightpath provisioning in the presence of wavelength conversion 3662

# **Topology abstraction**

Hierarchical routing in multi-domain optical networks 122

#### **Topology construction**

Power control based topology construction for the distributed wireless sensor networks 2774

# **Topology control**

Energy-aware multicasting in wireless ad hoc networks: A survey and discussion 2129

#### **Topology control**

Energy-aware topology control for wireless sensor networks using memetic algorithms 2753

#### **Topology control**

How much energy saving does topology control offer for wireless sensor networks? – A practical study 2867

#### 07.05.Tp

PEACH: Power-efficient and adaptive clustering hierarchy protocol for wireless sensor networks 2842

#### **TPC-App** benchmark

Evaluation of the effect of SSL overhead in the performance of e-business servers operating in B2B scenarios 3063

#### Traffic characteristics

Reduction of queue oscillation in the next generation Internet routers 3881

#### Traffic data coding

Anomaly detection in TCP/IP networks using immune systems paradigm 740

#### **Traffic Engineering**

Efficient Routing Heuristics for Internet Traffic Engineering 1942

#### Traffic engineering

Improved balancing heuristics for optimizing shortest path routing 1513

#### Traffic engineering

Inter-autonomous system provisioning for end-to-end bandwidth guarantees 3757

#### Traffic grooming

Heuristic and optimal techniques for light-trail assignment in optical ring WDM networks 990

# Traffic grooming

Traffic grooming, routing, and wavelength assignment in WDM transport networks with sparse grooming resources 3508

# Traffic load balancing

A hybrid meshed multipath forwarding scheme in wireless ad hoc networks 3346

#### Traffic pattern

An approach to achieve scalability through a structured peerto-peer network for massively multiplayer online role playing games 3075

#### Traffic scaling

Evaluation of network traffic workload scaling techniques 3096

# Traffic scheduling

Neural-based downlink scheduling algorithm for broadband wireless networks 207

#### Traffic scheduling

Performance analysis of a novel traffic scheduling algorithm in slotted optical networks 3559

#### **Transcoding**

An optimal solution for caching multimedia objects in transcoding proxies 1802

#### Transmission rate

Interleaved Traffic Splitting: A promising technique to solve False Timeout 3480

# Transmission scheduling scheme

A cross-layer transmission scheduling scheme for wireless sensor networks 2987

# Transport layer

Performance implications of a bounded receive buffer in concurrent multipath transfer 818

# Transport protocol

Performance implications of a bounded receive buffer in concurrent multipath transfer 818

# Transport protocols

Improving performance of transport protocols in multipath transferring schemes 3270

#### **Truncated ditribution**

A truncated bivariate generalized Pareto distribution 1926

#### **Trust**

Trust-based security for wireless ad hoc and sensor networks 2413

# Trust values

Adaptive security design with malicious node detection in cluster-based sensor networks 2385

#### Trusted device

Improving authentication of remote card transactions with mobile personal trusted devices 1697

#### TS

New bluetooth interconnection methods: Overlaid Bluetooth Piconets (OBP) and Temporary Scatternets (TS) 2258

#### Two-way traffic

Instability effects of two-way traffic in a TCP/AQM system 2172

# **Ubiquitous computing**

Agent based middleware infrastructure for autonomous context-aware ubiquitous computing services 577

# **Ubiquitous computing**

Using event detection latency to evaluate the coverage of a wireless sensor network 2699

# **Ubiquitous Internet**

QoS-aware Internet access schemes for wireless mobile ad hoc networks 369

#### UDP

A fair bandwidth distribution mechanism in a Diffserv network 358

#### UMTS

Analytical model for authentication transmission overhead between entities in mobile networks 1713

#### UMTS/HSDPA

Cross-layer modeling of capacity in wireless networks: Application to UMTS/HSDPA, IEEE802.11 WLAN and IEEE802.16 WiMAX 3384

#### Unequal error protection

Unequal error protection for real-time video in mobile ad hoc networks via multi-path transport 3293

#### Unequal loss protection

Packet loss resilience using unequal forward error correction assignment for video transmission over communication networks 3676

#### Universal generating function

Evaluation of all one-to-many reliabilities for acyclic multistate-node distributed computing system under cost and capacity constraints 3796

# Unresponsive flows

A queue management algorithm for fair bandwidth allocation 2048

#### User modelling

MPEG-21 digital items to support integration of heterogeneous multimedia content 592

#### **User-optimal routing**

Multihoming route control among a group of multihomed stub networks 3335

#### **User-perceived latency**

A user-focused evaluation of web prefetching algorithms 2213

# Userware

Userware: A framework for next generation personalized services 619

#### **Utility function**

Fairness comparison of FAST TCP and TCP Reno 1375

# Utilization

Performance analysis and evaluation for multi-traffic networks with priority control 1562

# UWB (ultra-wideband) systems

An adaptive packet scheduling algorithm for efficient downlink bandwidth allocation in UWB based wireless infrastructure networks 2087

#### Valiant load-balanced robust routing

Valiant load-balanced robust routing algorithm for multigranularity connection requests in traffic-grooming WDM mesh networks 3498

# Validation

Traffic modeling in wireless mobile systems by means of ring and toroidal cell layouts: Performance comparison and validation against measurement data 1116

# VANET

VARON: Vehicular Ad hoc Route Optimisation for NEMO 1765

# Variable bit rate video

Bandwidth estimation for multiplexed videos using multinomial model 269

#### VBR

Performance analysis and evaluation for multi-traffic networks with priority control 1562

#### Video on Demand Providers

Predictive connectionist approach for VoD bandwidth management 2236

#### Video transmission

Packet loss resilience using unequal forward error correction assignment for video transmission over communication networks 3676

#### Video transport over ad hoc networks

Unequal error protection for real-time video in mobile ad hoc networks via multi-path transport 3293

#### Video-on-demand

Convergence of periodic broadcasting and video-ondemand 1136

#### Virtual backbone

Fast distributed dominating set based routing in large scale MANETs 2880

# Virtual delay bound

A new scheduling scheme for high-speed packet networks: Earliest-virtual-deadline-first 2291

#### Virtual routing

Experiences with node virtualization for scalable network emulation 943

# Virtual topology

An efficient technique for a series of virtual topology reconfigurations in WDM optical networks 1301

# Virtual topology reconfiguration

A genetic algorithm for solving virtual topology configuration transition problem in WDM network 767

# Virtualization

Userware: A framework for next generation personalized services 619

#### Voice over IP

An ontology description for SIP security flaws 1367

# Voice over IP (VoIP) over WLAN (VoWLAN)

DualMAC: A soft handoff mechanism for real-time communications in secured WLANs 1785

# VolP

An objective-oriented service model for VoIP overlay networks over DiffServ/MPLS networks 3055

#### VOIP

Channel-aware VoIP packet scheduling in cdma2000 1x EV-DO networks 2284

# VolP

Handover management based on the number of data frame retransmissions for VoWLAN 3257

#### VolP

The packet-based networks performance requirements for real-time facsimile transmission 1289

#### VolE

WLAN VoIP capacity allocation using an adaptive voice packetization server 2661

#### VPN

Extensions to P2MP RSVP-TE for VPN-specific state provisioning with fair resource sharing 3736

# Vulnerability

Using the vulnerability information of computer systems to improve the network security 2032

### Waveband

Coupled-layer type waveband path design method corresponding to traffic demand fluctuation 965

#### Wavelength assignment

Traffic grooming, routing, and wavelength assignment in WDM transport networks with sparse grooming resources 3508

# Wavelength conversion

Distributed inter-domain lightpath provisioning in the presence of wavelength conversion 3662

#### Wavelength design

Coupled-layer type waveband path design method corresponding to traffic demand fluctuation 965

#### Wavelength division multiplexing

Coupled-layer type waveband path design method corresponding to traffic demand fluctuation 965

# Wavelength division multiplexing

Feedback-based offset time selection for end-to-end proportional QoS provisioning in WDM optical burst switching networks 904

#### Wavelength division multiplexing

Performance analysis of a novel traffic scheduling algorithm in slotted optical networks 3559

# Wavelength division multiplexing (WDM)

Distributed network control for establishing reliabilityconstrained least-cost lightpaths in WDM Mesh networks 1546

# Wavelength division multiplexing (WDM)

FARE: An efficient integrated MAC protocol for differentiated services in WDM metro rings 1315

# Wavelength Division Multiplexing (WDM)

Performance optimization with propagation delay analysis in WDM networks 3572

# Wavelength-division multiplexing (WDM)

A genetic algorithm for solving virtual topology configuration transition problem in WDM network 767

#### Wavelet transform

Detecting Denial-of-Service attacks using the wavelet transform 3203

# WBS, Waveband switching

A novel dynamic RWA algorithm with intelligent granularity regulation in multi-granular all-optical networks 3525

#### WDM

A hybrid method for solving ARWA problem on WDM network 385

#### WDM

Performance analysis of adaptive multipath load balancing in WDM-LOBS networks 3460

#### WDM mesh networks

Valiant load-balanced robust routing algorithm for multigranularity connection requests in traffic-grooming WDM mesh networks 3498

# **WDM** network

Study of signaling effects on Dynamic Traffic Grooming in IP/MPLS over WDM network 3586

# **WDM** networks

Quality of service based resource allocation for scheduled lightpath demands 3550

#### WDM optical networks

An efficient technique for a series of virtual topology reconfigurations in WDM optical networks 1301

#### WDM optical networks

Genetic evolutionary algorithm for static traffic grooming to SONET over WDM optical networks 3392

#### WDM optical networks

Traffic grooming, routing, and wavelength assignment in WDM transport networks with sparse grooming resources 3508

# WDM ring networks

Heuristic and optimal techniques for light-trail assignment in optical ring WDM networks 990

#### Web prefetching

A user-focused evaluation of web prefetching algorithms 2213

#### Web services

OSDA: Open service discovery architecture for efficient cross-domain service provisioning 546

#### Web services

Webmages: An agent platform based on web services 538

#### Web services selection

DiGA: Population diversity handling genetic algorithm for QoS-aware web services selection 1082

# Web100

Analytical and experimental evaluation of TCP with an Additive Increase Smooth Decrease (AISD) strategy 479

# Weight

Adaptive arrival rate dependent traffic balancing with redundancy 1220

#### WEF

Analysis of the effect of security on data and voice traffic in WLAN  $\,$  2468  $\,$ 

# WiMAX

Modeling of streaming and elastic flow integration in OFDMA-based IEEE802.16 WiMAX 3644

# **WIMAX**

Tiny MAP: An efficient MAP in IEEE 802.16/WiMAX broadband wireless access systems 2122

# Wireless

A P2P technology middleware architecture enabling usercentric services deployment on low-cost embedded networked devices 527

#### Wireless access networks

Performance evaluation of scheduling in IEEE 802.16 based wireless mesh networks 782

#### Wireless ad hoc network

Energy-aware multicasting in wireless ad hoc networks: A survey and discussion 2129

#### Wireless ad hoc networks

Sensor replacement using mobile robots 2615

# Wireless ad hoc sensor networks

HUSEC: A heuristic self configuration model for wireless sensor networks 1624

# Wireless broadcast

An efficient data placement for query-set-based broadcasting in mobile environments 1075

# Wireless cellular network

Adaptive location update area design for wireless cellular networks under 2D Markov walk model 2060

#### Wireless communications

Mobile computing: Opportunities for optimization research 670

#### Wireless communications

Neural-based downlink scheduling algorithm for broadband wireless networks 207

# Wireless communications (WCs)

Location based services using geographical information systems 3154

#### Wireless infrastructure networks

An adaptive packet scheduling algorithm for efficient downlink bandwidth allocation in UWB based wireless infrastructure networks 2087

#### Wireless internet

Design and implementation of wireless PKI technology suitable for mobile phone in mobile-commerce 893

#### Wireless LAN

Deployable multipath communication scheme with sufficient performance data distribution method 3285

#### Wireless LAN

Modified EDCF to improve the performance of IEEE 802.11e WLAN 841

#### Wireless LAN

Novel collision detection scheme and its applications for IEEE 802.11 wireless LANs 1350

#### Wireless LAN

Power control and fairness MAC mechanisms for 802.11 WLANs 1527

# Wireless LAN

WLAN VoIP capacity allocation using an adaptive voice packetization server 2661

# Wireless LAN (WLAN)

DualMAC: A soft handoff mechanism for real-time communications in secured WLANs 1785

# Wireless mesh networks

An efficient multipath structure for concurrent data transport in wireless mesh networks 3358

#### Wireless mesh networks

Performance evaluation of scheduling in IEEE 802.16 based wireless mesh networks 782

#### Wireless mobile systems

Traffic modeling in wireless mobile systems by means of ring and toroidal cell layouts: Performance comparison and validation against measurement data 1116

# Wireless networks

A novel channel assignment scheme for improving channel reuse efficiency in multi-channel ad hoc wireless networks 3416

# Wireless networks

Adaptive resource reservation schemes for proportional DiffServ enabled fourth-generation mobile communications system 1613

#### Wireless networks

Dynamic radio resource allocation for 3G and beyond mobile wireless networks 41

#### Wireless networks

Performance evaluation of a new backoff method for IEEE 802.11 3698

# Wireless Public Key Infrastructure

Design and implementation of wireless PKI technology suitable for mobile phone in mobile-commerce 893

#### Wireless routers

Practical channel state aware and cooperative packet scheduling disciplines for coordinating colocated Bluetooth and IEEE 802.11b devices 1569

# Wireless security

Analysis of the effect of security on data and voice traffic in WLAN 2468

#### Wireless sensor and actor networks

Wireless sensor and actor networks context interpretation for the emergency preparedness class of applications 2593

#### Wireless sensor network

A Delaunay Triangulation based method for wireless sensor network deployment 2744

# Wireless sensor network

A survey of key management schemes in wireless sensor networks 2314

#### Wireless sensor network

An efficient intruder detection algorithm against sinkhole attacks in wireless sensor networks 2353

#### Wireless sensor network

An optimal coverage-preserving scheme for wireless sensor networks based on local information exchange 2708

#### Wireless sensor network

DAR: An energy-balanced data-gathering scheme for wireless sensor networks 2812

#### Wireless sensor network

Directional geographical routing for real-time video communications in wireless sensor networks 3368

# Wireless sensor network

Energy-aware location error handling for object tracking applications in wireless sensor networks 1443

#### Wireless sensor network

Guaranteeing the network lifetime in wireless sensor networks: A MAC layer approach 2532

# Wireless sensor network

Power control based topology construction for the distributed wireless sensor networks 2774

# Wireless sensor network

Reliable bursty convergecast in wireless sensor networks 2560

# Wireless sensor network

Using event detection latency to evaluate the coverage of a wireless sensor network 2699

# Wireless sensor networks

A survey on clustering algorithms for wireless sensor networks 2826

# Wireless sensor networks

A TDMA scheduling scheme for many-to-one communications in wireless sensor networks 863

# Wireless sensor networks

A virtual infrastructure for large-scale wireless sensor networks 2853

# Wireless sensor networks

Adaptive clustering in wireless sensor networks by mining sensor energy data 2968

# Wireless sensor networks

An efficient routing scheme with optimal power control in wireless multi-hop sensor networks 2735

# Wireless sensor networks

Demand-scalable geographic multicasting in wireless sensor networks 2931

#### Wireless sensor networks

Energetic sustainability of routing algorithms for energyharvesting wireless sensor networks 2976

#### Wireless sensor networks

Energy-aware topology control for wireless sensor networks using memetic algorithms 2753

#### Wireless sensor networks

Fault-resilient sensing in wireless sensor networks 2375

#### Wireless sensor networks

GPS-less location algorithm for wireless sensor networks 2904

# Wireless sensor networks

How much energy saving does topology control offer for wireless sensor networks? – A practical study 2867

#### Wireless sensor networks

Mobile object tracking in wireless sensor networks 1811

#### Wireless sensor networks

On the efficient and fast response for sensor deployment in sparse wireless sensor networks 3892

#### Wireless sensor networks

Pair-wise path key establishment in wireless sensor networks 2365

#### Wireless sensor networks

Path planning of mobile landmarks for localization in wireless sensor networks 2577

#### Wireless sensor networks

PEACH: Power-efficient and adaptive clustering hierarchy protocol for wireless sensor networks 2842

#### Wireless sensor networks

Resilience of sink filtering scheme in wireless sensor networks 55

# Wireless sensor networks

SEEM: Secure and energy-efficient multipath routing protocol for wireless sensor networks 2401

# Wireless sensor networks

Trust-based security for wireless ad hoc and sensor networks 2413

# Wireless sensor networks

Using overhearing technique to detect malicious packet-modifying attacks in wireless sensor networks 2342

# Wireless sensor networks

Wireless sensor networks: A survey on the state of the art and the 802.15.4 and ZigBee standards 1655

# Wireless sensor networks (WSN)

Using artificial intelligence in routing schemes for wireless networks 2802

# Wireless sensor networks (WSNs)

Distributed direction-based localization in wireless sensor networks 1424

# Wireless video communication

Directional geographical routing for real-time video communications in wireless sensor networks 3368

#### Wireless/Mobile networks

An RSVP based seamless resource reservation scheme for wireless mobile networks 81

#### WLAN

An Accelerated IEEE 802.11 Handoff Process Based on the Dynamic Cluster Chain Method 1383

#### WLAN

Analysis of the effect of security on data and voice traffic in WLAN  $\,\,$  2468  $\,\,$ 

#### WLAN

Cross-layer error-control with low-overhead ARQ for H.264 video transmission over wireless LANs 1476

#### WLAN

Low-latency handoff inter-WLAN IP mobility with broadband network control 750

#### WLAN handover

Handover management based on the number of data frame retransmissions for VoWLAN 3257

#### WLAN MAC protocol

An *M*-time inheriting transmission strategy for interactive multimedia applications in wireless networks 1187

#### WMANET

Architectural framework for wireless mobile ad hoc networks (AF WMANETs) 178

#### Workload prediction

Adjusted fair scheduling and non-linear workload prediction for QoS guarantees in grid computing 499

#### World Wide Web

An optimal solution for caching multimedia objects in transcoding proxies 1802

# Wormhole switching

A deadlock detection mechanism for true fully adaptive routing in regular wormhole networks 1826

# WSN

Energy-efficient geographic multicast routing for Sensor and Actuator Networks 2519

# XML

Crosslayer firewall interaction as a means to provide effective and efficient protection at mobile devices 1487

# XML

Webmages: An agent platform based on web services 538

#### XML-based communication

OSDA: Open service discovery architecture for efficient cross-domain service provisioning 546

#### **ZigBee**

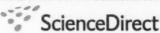
Wireless sensor networks: A survey on the state of the art and the 802.15.4 and ZigBee standards 1655

# ZRP

Fisheye zone routing protocol: A multi-level zone routing protocol for mobile ad hoc networks 261



Available online at www.sciencedirect.com



Computer Communications 30 (2007) XXXIX-XLII

computer

www.elsevier.com/locate/comcom

# Author Index of Volume 30

Abbasi, A. A. 2826 Abd El Al, A. 3293 Abonamah, A. A. 3193 Acquaviva, A. 2976 Adamopoulou, E. 3807 Agoulmine, N. 2236 Ahmad Masoud, F. 3904 Ahmed, R. 546 Ahmed, T. 638 Ahn, C. W. 202 Ahn, S. 1913 Akhtar, N. 608 Al Mobaideen, W. 1931 Al-Akaidi, M. 178 Al-Bayari, O. 3154 Al-Fugaha, A. 2510 Al-Fuqaha, A. I. 3508 Al-Ibrahim, O. 2510 Al-Saraireh, J. 1713 Alaoui, L. 66 Alazemi, H. M. K. 3652 Alba, E. 653, 685 Albarrak, S. 3085 Albrecht, A. A. 101 Albright, E. 3193 Ali. M. M. 1926 Aljaž, T. 1289 AlMobaideen, W. 3904 Almomani, I. 178 Alonistioti, A. 516 AlQahtani, S. A. 41 Alves, M. 17 Amer, P. D. 818, 3215 Anerousis, N. 497 Ansari, N. 2375 Araujo, R. B. 2593, 2708 Arias, J. 2904 Arora, A. 2560 Asgari, A. 638 Asif, M. 3027 Assi, C. 1841 Astarloa, A. 2904 Atmaca, T. 315 Avanaki, A. N. 2191 Awwad, O. 3508 Azcorra, A. 1765

Bachir, A. 2603 Bahk, S. 886, 2284 Bamatraf, M. 1513 Banka, T. 1980 Barbancho, A. 2802 Barbancho, J. 2802 Bare, A. A. 1980 Barka, E. 2468 Baronti, P. 1655 Barthel, D. 2603 Bassi, S. 479 Baziana, P. A. 3572 Belo, C. 975 Ben Rejeb, S. 1953 Benjapolakul, W. 2478 Bennani, Y. 2236 Bernardos, C. J. 1765 Berti-Équille, L. 638 Bhattachariee, P. S. 326 Bi, Y. 2812 Biniaris, C. G. 538 Boavida, F. 1765 Bogliolo, A. 2976 Boonthum, C. 670 Borcoci, E. 638 Bottoni, A. 1697 Bouabdallah, N. 2686 Boudriga, N. 999, 3012, 3203 Boukerch, A. 2413, 3905 Boukerche, A. 2593, 2649, Boulmalf, M. 2468 Boult, T. 3859 Boustead, P. 3075 Boutaba, R. 546 Boutignon, A. 619 Bouvry, P. 685, 740 Bowden, M. 1044 Braun, T. 1441 Byun, H. 3736 Byun, S.-S. 2162

Cahon, S. 698
Cai, Y. 144
Calderón, M. 1765
Calle, E. 3161
Candan, İ. 1036
Candan, K. S. 2931
Cao, G. 1854
Cao, J. 1899, 2225
Carle, G. 1441
Casetti, C. 3307
Castel, H. 219
Caviglione, L. 3107

Cervellera, C. 3107 Cha, H. 1443 Chahed, T. 3384, 3644 Chaitou, M. 219 Chakraborty, M. 1244 Chan, S. 2172 Chang. A. 2258 Chang, B.-J. 3892 Chang, C.-Y. 1424, 1527, 1742 Chang, H.-R. 1527 Chang, L. 1220 Chang, M. 81 Chang, W.-R. 1315 Chang, Y.-C. 2070 Chao, H.-C. 2385, 2892 Chen, C.-W. 2070 Chen, D. 2954 Chen, G. 2172 Chen. H. 3055 Chen, H.-H. 2311, 2497, 2697, 2753, 2987 Chen. J. 1082, 2060 Chen, J.-L. 2070 Chen. K. 3690 Chen. L. 2453 Chen, M. 3368 Chen, M.-C. 2070 Chen, S. 873, 3586 Chen, T.-S. 1811 Chen, W.-M. 2892 Chen, Y. 2401, 3550 Chen, Y.-L. 1538 Chen, Y.-W. 807 Cheng, B.-C. 3055 Cheng, H. 2225 Cheng, J.-C. 2365 Cheng, K.-Y. 2699 Cheng, L.-W. 2342 Cheng, R. H. 1152 Cheng, W. 2274 Chessa, S. 1655 Chetoui, Y. 2686 Chiang, F.-Y. 2892 Chien, S. F. 249 Chiu, T.-Y. 132 Chlebus, E. 1116 Cho, Y. 2842 Choi, J. 3652 Choi, J.-Y. 1476 Choi, Y. 2532, 2560

Choi, Y.-H. 153 Choi, Y.-J. 2284, 2291 Cholvi, V. 1136 Chong, P. H. J. 5 Chook, V. W. C. 1655 Choong, K. N. 249 Chorzempa, M. 1964 Chou, C.-H. 2342 Choukair, Z. 1953 Chow, C.-O. 1754 Chu, C.-P. 1811 Chu, X. 2428 Chua, K. C. 904 Chuang, Y.-R. 1187 Chuang, Y.-T. 1613 Chung, K. 358 Chung, Y. W. 166 Chung, Y.-C. 2744 Chunlin, L. 1641, 1890 Chuon, C. 1178 Ci, S. 2968 Conner, W. S. 2917 Crawford, M. 1044 Crowley, J. L. 577 Cuervo, F. 546 Czarlinska, A. 2546

Dafang, Z. 428 Dahshan, M. H. 3841 Dang, B. L. 3598 Dang, X.-H. 3193 Das, C. R. 1854 Das, G. 3614 Das, S. 2615 Das, S. K. 1106 Das, S. M. 2577 Datta, D. 3614 Davies, J. 280 De Rango, F. 3126 de Souza, J. N. 2236 de Veciana, G. 3218 De, S. 3346 Demestichas, K. 3807 Demestichas, P. 3807 Dimitrakopoulos, G. 3807 Din, D.-R. 385, 767 Dini, G. 1697 Dirani, M. 3384 Doering, M. 3232 Domènech, J. 2213 Dong, L. 1375

Dong, Y. 2442
Dooley, L. S. 1624
Dorronsoro, B. 685
Dou, W. 2096
Doulamis, A. 499
Doulamis, N. 499
Drissi, J. 1142
Du, H. 1870
Du, X. 2274, 2314, 2721
Duan, Q. 830
Duato, J. 731
Duc, P. M. 2478
Duda, A. 2603

Ece (Guran) Schmidt, S. 1258
Eger, K. 3046
El-Alfy, E. M. 2010
El-Badawi, K. 3425
El-Hajj, W. 2880
EL-Khatib, K. 2413, 3905
Elleingand, S. 416
Eltoweissy, M. 1964, 2627
Entrialgo, J. 3063
Eom, D.-S. 1205, 1337
Eun, D. Y. 1091
Evans, B. G. 1870

Faez, K. 2021 Fahmy, S. 1441 Fan, L. 1870 Fawaz, W. 3690 Fei, X. 2708 Feng. W. 192 Fernández-Veiga, M. 3460 Fiengo, P. 207 Fiore, M. 3307 Firooz, M. H. 2191 Foo, S. Y. 3823 Forné, J. 1498 Fortin, J.-P. 1165 Foukarakis, I. E. 538 Fu, C. P. 3778 Fu, Q. 3321

Galante, G. 3307 Galloway, M. 2314 Gaogang, X. 428 Garcia-Luna-Aceves, J. J. 1015 García, D. F. 3063 García, J. 3063 García, M. 3063 García, R. 3063 Garcia, M. L. 3662 Garg, H. K. 192 Geneiatakis, D. 1367 Georgiades, M. 608 Georgios, K. 638 Georgoulas, S. 3757 Gerla, M. 2258 Ghahfarokhi, B. S. 2676 Ghani, N. 122, 3662 Ghasemi, A. 2021 Giambene, G. 207 Gil, J. A. 2213 Gomes, D. G. 2236 Gondal, I. 1624 González-Ortega, M. A. 3460 Gotta, A. 1655 Gouda, M. G. 2560 Grout, V. 280 Guan, C.-T. 1613 Guang, L. 1841 Guemara El Fatmi, S. 999 Guha, S. 1178 Guizani, M. 2968 Guizani, S. 2311 Gumaste, A. 122, 990, 3662 Guo, L. 1331, 1419, 1794 Guo, M. 2497 Guo, S. 1058, 2129

2917

Guo, X.

Ha. H. 3676

Ha, R. 1443 Habib, S. J. 1029, 3117 Hafid, A. 1142 Haidari, F. 3425 Hama, T. 3285 Hamdi, M. 3203 Han, B. 782 Harle, D. 3085 Harmantzis, F. 750 Haseeb, S. 849 Hasegawa, Y. 3285 Hassanein, H. 1600 Hébuterne, G. 219 Heinzelman, W. B. 3705 Heo, J. 2842 Hernández-Serrano, J. 1498 Herrscher, D. 943 Hessler, S. 630 Heusse, M. 2603 Ho, K.-H. 3757 Ho, S.-Y. 93 Hogie, L. 685 Hong, J. 886, 2842 Hou, T. 1220 Howarth, M. 3757 Hsia, P.-L. 2032 Hsiao, S.-Y. 453 Hsieh, C.-Y. 807 Hsieh, K.-Y. 2774 Hsieh, M.-Y. 440, 2385 Hsu, C.-F. 3525 Hsu. W.-H. 1406 Hu, F. 2314 Hu, X. 3358, 3746 Hu, Y. C. 2577, 2615 Hu, Y. F. 1655

Huang, C.-J. 1613 Huang, C.-M. 288, 1383, 3239 Huang, J. 144 Huang, Y.-F. 132, 2248 Huang, Y.-M. 440, 2385 Hui, L. C. K. 2442 Hur, K. 1205, 1337 Hwang, H. Y. 166 Hwang, K. 1205

Imperl, B. 1289 Indulska, J. 3321 Ippoliti, D. 3859 Iqbal, M. 1624 Iraqi, Y. 546 Ishii, H. 1754 Islam, M. M. 233 Ismail, A. F. 849 Ivins, J. 178 Iyengar, J. R. 818 Iyengar, S. S. 2721

Jaekel, A. 3550 Jajodia, S. 793 Jamalipour, A. 2375 James, T. 2180 Jayasumana, A. P. 1980 Jhunihunwala, A. 3491 Jia, W. 782 Jia, X. 3627, 3746 Jiang, J.-W. 2248 Jiang, X. 3075 Jiang, Y. 2428 Jianping, W. 1588 Jiménez, J. 2904 Jin, C. 3870 Jin, M. 3449 Jinmin, Y. 428 Joglekar, A. 3614 Joo, C. 886 Jucá, K. R. L. 2649 Jung, H. 2532 Jung, S. 2258

Kahani, M. 2201 Kaklamani, D. I. 538 Kaloxylos, A. 516 Kang, M. Y. 1396 Kang, S. 1337 Kantarci, B. 315 Kapellaki, S. 564 Karaman, A. 1600 Karpouzis, K. 592 Kashihara, S. 3257 Kato, N. 2375 Katsikas, S. 497 Kavadias, C. D. 527 Ke, X. 1588 Khelil, A. 3144 Khlifi, Y. 999, 3012 Kholaif, A. M. 2661

Killat, U. 3046 Kim, H. S. 1258, 2122 Kim, H.-M. 2291 Kim, I. 93 Kim, N. 1913 Kim, S. 1199 Kim, S. H. 1199 3851 Kim, S.-C. Kim. Y. Y. 3676 Kitsuregawa, M. 1802 Ko, K.-T. 2172 Kök, M. A. 122 Komathy, K. 3721 Konstantinidis, A. 2753 Koonen, A. M. J. 3598 Kopec, G. 3027 Korkmaz, T. 2096 Kormentzas, G. 497 Kostaridis, A. I. 538 Kotsopoulos, S. 396 Koucheryavy, Y. 1441 Kountanis, D. 2880 Koutsakis, P. 404 Koutsoloukas, E. 564 Koutsonikolas, D. 2577 Koutsopoulou, M. 516 Ku, H.-H. 288 Kumar, M. 1106 Kundur, D. 2546 Kung, H.-Y. 288 Kuo, W.-K. 856 Kwak, K. 1278 Kwok, Y.-K. 1569, 2087 Kwon, T. 2532

Labrador, M. A. Lahde, S. 3232 Lai, W. K. 453, 1613 Lai, Y.-C. 341 Lai, Y.-P. 2032 Lakas, A. 2468 Lambrinoudakis, C. 1367 Langendoerfer, P. 1487 Larrode, M. G. 3598 Lattanzi, E. 2976 Layuan, L. 1641, 1890 Lázaro, J. 2904 Lazzez, A. 999 Lee, C. 369 Lee, H. 81, 2532 Lee, J. 893, 3218 Lee, J.-H. 1205, 1337 2744 Lee, K.-C. Lee, M. 81, 3293, 3736 Lee, M. J. 3358 Lee, S. 1826 Lee, S.-B. 153 Lee, S.-M. 1443 Lee. W. 369 Lee, W.-C. 1854 Lee, Y. 893, 1913 Lee, Y. W. 1199

Lee, Y.-W. 1337 Lehmann, M. 1487 Leneutre, J. 2453 León, C. 2802 Leong, U.-P. 351 Leung, V. C. M. 3368 Levinstein, I. B. 670 Li.C. 1058 Li, C.-S. 2892 Li, D. 3096, 3746 Li, D. T. 546 Li, J.-W. 1383 Li, K. 1802 Li, L. 3498 Li. N. 2812 Li, V. O. K. 2442, 3480 Li, X. 3905 Li, Y. 1721 Liang, Q. 2987 Liao, X. 1058 Lijun, W. 1588 Lim, H. 1396 Lim, S. 1854 Limam, N. 546 Lin. C. 2428 Lin, C.-B. 2149 Lin, C.-Y. 288 Lin, H.-T. 1315 Lin, L. 782 Lin, W. 3403 Lin, W.-Y. 841, 3442 Lin, Y.-C. 453 Lin. Y .- D. 351 Ling, Y. 873 Litke, A. 499 Liu, C. 302, 2917 Liu, C.-L. 3403 Liu, D. 793, 3627 Liu, J. 2353 Liu, L. 3471 Liu, Q. 122, 3662, 3746 Liu, X. 1165 Liu, Y. 2087, 3335 Lo. P. H. 1785 Loomes, M. J. 101 López-Ardao, J. C. 3460 López-García, C. 3460 Louvros, S. 396 Low, A. L. Y. 249 Lu. H. 3787 Lu, Y.-H. 2615 Lu, Y.-J. 2735 Luna, F. 685 Lyu, M. R. 2353

Ma, M. 55 Maach, A. 1142 Machado, R. B. 2649 Maglogiannis, I. 592 Mahmoud Mimi, H. 3904 Mahmoud, A. S. 41 Maier, S. 943 Majumdar, S. 3027 Malcolm, J. A. 101 Malvankar, A. 3823 Mao, J. 863 Mao. S. 3368 Marano, S. 3126 Marchese, M. 3179 Margolis, A. 3652 Martins, S. L. 656 Marzo, J. L. 2995, 3161 Masoom Ali, M. 1 Masoud, F. A. 1931, 3904 Mbateng, G. 93 McGinn, J. 280 McKinley, P. K. 1994 Mehaoua, A. 638 Mei, Y. 2615 Melab, N. 698 Melús-Moreno, J. L. 2113 Merakos, L. 516 Mimi, H. M. 1931 Min, J. 2867 Minooei, H. 3698 Misra, I. S. 1244 Misra, S. 3169 Mo. S. 358 Mohan, G. 904, 1546 Molina, F. J. 2802 Mongelli, M. 3179 Morillo, P. 731 Movahhedinia, N. 2676 Mrak, U. 1289 Mueller, P. 2311 Mukherjee, A. 326, 1244 Munilla, J. 52 Murakami, K. 965 Murase, T. 3285 Murshed, M. 233

Nabeshima, M. 33 Nadarajah, S. 1, 1926 Nakayama, H. 2375 Nallanathan, A. 192 Nam, Y. 2532 Nanya, T. 1802 Narayanasamy, P. 3721 Naskar, M. K. 3392 Nasser, N. 1953, 2401 Nebro, A. J. 685 Ngai, E. C. H. 2353 Nicopolitidis, P. 957 Niemegeers, I. 3598 Nojumi, H. 3698 Notare, M. S. M. A. 2649 Nottingham, Q. 2180

Obaidat, M. S. 923, 957, 999, 2995, 3012, 3169 Obraczka, K. 1015 Oie, Y. 3257 Oktug, S. F. 315 Olariu, S. 670 Orduña, J. M. 731 Othman, M. 1513 Ouyang, J. 2497 Øverby, H. 1229

Pakravan, M. R. 2191 Palacharla, P. 990 Pan, M. 3787 Panagakis, A. 499 Pandis, I. 577 Pao, D. 302 Papadimitriou, G. I. 957 Papadimitriou, P. 1451 Papaioannou, E. Park, B.-N. 369 Park, D. 2853 Park, E. K. 1301 Park, J. 1199 Park, J.-M. 1964 Park, N. 1205 Park. S. 2867 Pavlou, G. 3757 Pegueroles, J. 1498 Peinado, A. 52 Peiyan, Y. 1890 Peng, J.-B. 3892 Perreau, S. 3321 Peter, S. 1487 Pierre, S. 66, 416 Pigli, E. 670 Pillai, P. 1655 Piotrowski, K. 1487 Piratla, N. M. 1980 Politis, C. 608 Polymenakos, L. 577 Pomportsis, A. S. 957 Pont, A. 2213 Poo. G.-S. 3586 Postigo-Boix, M. 2113 Potemans, J. 3096 Pountourakis, I. E. 3572 Prasad, R. V. 3598 Prathombutr, P. 1301 Prezerakos, G. 564

Qaddoura, E. 1931, 3904 Qiao, C. 3346 Qin, Y. 3559 Qiu, P. 2765 Qu, W. 1802 Quintero, A. 66

Pujolle, G. 3690

Pylarinos, J. 396

Rahman, M. 750 Rajalakshmi, P. 3491 Rao, N. S. V. 2721, 3662 Ratnam, J. 3614 Ravindran, K. 1165 Rayes, A. 3508 Rayi, V. K. 2314 Reddy, A. L. N. 3335 Regini, E. 2976 Reynolds, P. 178 Rezgui, A. 2627 Rhee, I. 2867 Ribeiro, C. C. 656 Rodríguez-Rubio, R. F. 3460 Rojas-Cessa, R. 2149 Rolla, V. G. 1942 Ronasi, K. 2191 Rosseti, I. 656 Rostambeik, S. 619 Rothermel, K. 943, 1466 Rouskas, A. 592 Roy, K. 3392 Roy, S. 3652 Rueda, S. 731 Ruiz, P. M. 2519 Rupp, S. 527

Saadawi, T. 3293 Sadoun, B. 3154 Safaei, F. 3075 Saha, D. 326, 1244 Sahoo, P. K. 2774 Sahuquillo, J. 2213 Salah, K. 3425 Salamah, M. 1036 Salles, R. M. 1942 Sanchez, J. A. 2519 Santamaria, A. F. Sarkar, D. 269, 3215 Sarkar, U. K. 269 Satizábal, C. 1498 Schulzrinne, H. 927, 3000 Segarra, J. 1136 Selvakennedy, S. 2786 Seo, S.-W. 1350 Seredynski, F. Setia, S. 793 Sha, E. H. 1899 Shang, Y. 2786 Shao, Z. 1899 Sharif, H. 2968 Shen, H. 1106 Shen, X.. 2428 Sheu, J.-P. 2365, 2774 Sheu, S.-T. 1187 Sheu, T.-L. 2735 Shi, M. 2428 Shih, K.-P. 1424 Shim, K.-A. 117 Shimonishi, H. 3285 Shin, J. 1476 Shin, J.-H. 2853 Shurkova, E. 670 Shyamsukha, R. 3614 Siew, C. K. 3559 Silva, F. H. S. 2593 Simoni, N. 619 Singh, K. 927 Sinnappan, S. 2786

Sleurs, K. 3096 Sobral, J. B. M. 2649 Soldatos, J. 577 Song, J. 893 Soto, I. 1765 Ssu, K.-F. 2342 Stamatis, K. 577 Stepanov, I. 1466 Stewart, K. 1122 Stewart, R. 818, 3215 Stojmenović, I. 3627 Stojmenovic, I. 2519 Su, H.-K. 3055 Su, S. 1082 Su. W. 3823 Suárez-González, A. 3460 Sui, A.-F. 2442 Sun, B. 2314 Sun, J. 1731, 2172 Sun, L. 2812 Sun, Y.-H. 1613 Sung, D. K. 166 Suthaharan, S. 3881

Tabbane, S. 1953 Tafazolli, R. 608 Taheri, J. 714 Tai, C. 1220 Tak, S. 1301 Takahashi, Y. 2048 Takayama, S. 965 Talbi, E.-G. 653, 698 Tan. L. 1375 Tan, S. K. 904 Tan, S. W. 249 Tang, C. 1994 Tang, Y. 873 Tarhini, C. 3384, 3644 Tavli, B. 3705 Theunis, J. 3096 Todd, T. D. 2661 Tode, H. 965 Tombros, S. L. 527 Toosi, A. N. 2201 Tovar, E. 17 Trabelsi, Z. 2880 Tragoudas, S. 1122 Trentin, E. 207 Tropea, M. 3126 Trung, H. D. 2478

Tsagkaris, K. 3807
Tsai, C.-H. 3239
Tsai, F.-H. 2301
Tsai, H.-W. 1811
Tsao, S.-C. 351
Tsao, S.-L. 1785
Tsaoussidis, V. 1451
Tselikas, N. 564
Tseng, H.-W. 1187
Tseng, L.-P. 261
Tseng, Y.-C. 2699
Tu, F. 1562
Tung, M.-C. 1406

Urra, A. 3161

Vaishampayan, R. 1015 Vaishnavi, V. K. 2721 Van de Capelle, A. 3096 Van Lil, E. 3096 Varshney, P. K. 2954 Varvarigos, E. 499 Varvarigou, T. 499 Venieris, I. 497, 564 Venieris, I. S. 538 Vergados, D. 592 Vergados, D. D. 527 Verma, P. K. 3841 Vijaya Saradhi, C. 1546 Vijaykumar, R. 3652 Vilà, P. 3161 Villas, L. 2593 Voicu, L. M. 479 Vroblefski, M. 2180

Wang, J. 2087 Wang, J. Z. 1721 Wang, J.-S. 2301 Wang, J.-W. 1538 Wang, L. 2060 Wang, M.-S. 440 Wang, N. 3757 Wang, N.-C. 2248 Wang, P. 144 Wang, S. 3498 Wang, S.-S. 1424 Wang, X. 1091, 2225 Wang, Y. 93, 2987

Vuta. S. 3614

Wang, G. 2497

Wang, Y.-C. 2301, 2699 Wang, Z. 1106 Warrier, A. 2867 Welzl, M. 630 Wen, J.-H. 1538 Wenwei, L. 428 Wolf, L. 3232 Woungang, I. 3169 Wu. C.-C. 3403 Wu, C.-H. 2744 3832 Wu, C.-M. 1075 Wu, G.-M. Wu, H.-T. 1315 Wu, J.-S. 841, 3442 Wu, L.-Y. 1406 Wu, Q. 2721 Wu, S. 2931 Wu, S.-L. 3416 Wu, T.-K. 1152 Wu, W. 1044 Wu, X. 863 Wu, Z. 863

Xi-Huang, Z. 3870 Xian, C. 2615 Xiao, B. 1899 Xiao, Y. 2314 Xu, L. 2413 Xu, S. 3480 Xu, X. 144 Xue, D. 3559

Yabandeh, M. 3270 Yamaguchi, I. 3285 Yamaguchi, T. 2048 Yang, C.-C. 261 Yang, D. 1058 Yang, F. 3498 Yang, J.-Y. 3416 Yang, K. 2753 Yang, O. W. W. 2129, 3449 Yang, S. 2122 Yang, Y. 2697, 3471 Yao, C. 793 Yarvis, M. 2917 Yazdani, N. 3270 Ye, Y. 1841 Yee, Y. C. 249 Yeh, W.-C. 3796

Yeung, K. L. 3480

Yi, S. 2842 Yim, C. 1396, 3676 Yip, H. K. 1569 Yiu, S. M. 2442 Yoo, C. 2162 Younis, M. 2826 Yousef, S. 1713 Yu, C. W. 1152 Yu. G. 2765 Yu, G.-J. 1742 Yu, J. Y. 5 Yu, M. 3823 Yu, Y. 465 Yuan, C. 1375 Yuan, D. 2987 Yuan, L. 2274 Yuan, Y. 3368 Yue, D. 1562 Yue, W. 1562 Yuen, W. H. 3000 Yun, J.-H. 1350

Zahrani, M. S. 101 Zaragoza, D. 975 Zarifzadeh, S. 3270 Zbiezek, T. 1116 Zhang, C. 1082 Zhang, H. 1562, 2560 Zhang, K. 3778 Zhang, L. 3321 Zhang, Q. 2753 Zhang, X. 3498 Zhang, Y. 2060 Zhang, Z. 2765, 3471 Zheng, J. 2060 Zheng, Q. 465 Zheng, Y. 2096 Zhou, K. 3480 Zhou, L. 1546 Zhou, W. 269 Zhou, X. 3859 Zhu, H. 1278 Zhu, S. 793 Zhuge, Q. 1899 Ziembicki, J. 546 Zomava, A. Y. 653, 670, 714 Zukerman, M. 1375, 1731, 2172 Zuloaga, A. 2904

